Electro-Voice®

pro sound 2oo4

STEP UP TO EV!

Founded in 1927 as a microphone company, Electro-Voice® has grown into one of today's dominant worldwide forces in design and manufacturing of top-quality products for broadcast, touring sound, permanently installed sound reinforcement and music playback systems.

Recognized the world over as a leader in audio technology, EV® is ubiquitous in performing arts centers, sport facilities, houses of worship, cinemas, dance clubs, transportation centers, theaters, and, of course, live music.

EV's reputation for providing superior audio products and dedication to innovation continues today. Whether EV microphones, loudspeakers systems, amplifiers or signal processors, the EV solution is always step up in performance and reliability. EV, a product brand of Telex Communications, Inc., shares technology with other Telex product brands: Dynacord®, Klark-Teknik®, Midas®, RTS®, and TELEX®.

1934—EV invents the humbucking coil for microphones (still a standard almost 70 years later).

1940s—EV introduces noise cancellation to microphones; revolutionizes tank and aircraft communications.

1954—EV introduces Variable-D® microphone technology, a means of eliminating the up-close bass boost of conventional, single-D directional microphones—for high vocal intelligibility under the typical varying conditions of use in churches and meeting rooms.

1963—EV receives an award from the Academy of Motion Picture Arts and Sciences for the development of a shotgun microphone—the 642 Cardiline®—which significantly advances the quality of sound on film.

1974—EV develops constant-directivity (CD) horns. For the first time, a loudspeaker maintains its rated coverage angles over a wide frequency range, for significantly more uniform sound quality and higher intelligibility throughout the audience.

2004:

1986—EV revolutionizes concert sound reinforcement by introducing Manifold Technology®. In each of four bandpasses covering the entire frequency range, the output of four loudspeakers is flawlessly combined – or "manifolded"– into a single horn or low-frequency enclosure. The result is – in a physical package a fraction of the size of conventional concert rigs – four times the acoustic output without the drastically uneven coverage of multiple acoustic sources "stacked" for more output.

1990s—EV invents RMD™ technology (Ring-Mode Decoupling), a revolutionary anodyne to sonic distortion and coloration. Speaker system resolution and clarity increases by minimizing fundamental resonant frequencies.

2000—EV invents VOB™ technology (Vocal-Optimized Bass), an innovative mechanical design that significantly reduces proximity effect, allowing for greater vocal intelligibility and instrumental clarity. EV also invents ClearScan™, a revolutionary innovation in wireless technologies that enables automatic, frequency agile selection of the best of ten UHF channels.

2001/2002—EV introduces RACE technology (Realtime Acoustic Cluster Editor), a synergetic concept of correlating digital crossover and filter design with realworld loudspeaker behaviour.

2003/2004—IRIS (Intelligent Remote & Integrated Supervision) becomes the new software platform to control & monitor complex audio systems, including signal processing, amplifiers and loudspeakers in real-time.

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EVI Vari Intense®

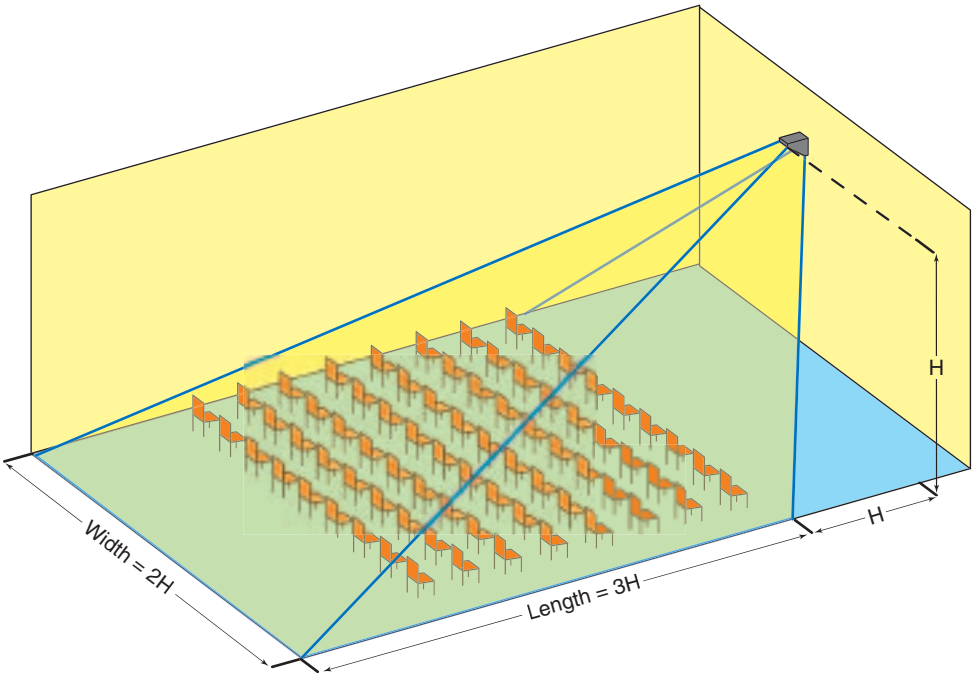
Electro-Voice®'s unique EVI Vari Intense® (VI) speakers are engineered to eliminate the need for additional long-throw horns or delayed sources in many rooms. The EVI Vari Intense® series provides an economical solution for permanent installations that require coverage over a rectangular area. In a typical room, the distance from the loudspeaker to the last row is two or more times that to the front row, resulting in a substantial loss in level and intelligibility at the rear. The VI horn delivers 6 to 8 dB more SPL to the back of the room, overcoming the level loss without resorting to the expense and complexity of additional speaker systems or components.

The problem is old; EV®'s solution is new. EVI is perfect for conference centers, houses of worship, halls, and other venues where evenly distributed SPL is essential. EVI systems are made of 18 mm 13-ply birch plywood (EVI 28: 12 mm 9-ply), texture-painted with a powder-coated metal grille.

A simple 3-2-1 rule-of-thumb applies for determining EVI coverage patterns: The pattern's width will equal twice the height of the room, and the pattern's length will equal three times the height. See the illustration below.

EVI Vari Intense® coverage pattern (3-2-1 Rule):

If speaker height = H, then coverage length = 3H, coverage width = 2H, and first row coverage = 1H



EVI-28

- Two-way, full-range loudspeaker
- Vented LF enclosure
- 1.25" voice coil (titanium diaphragm)
- PRO™ Driver protection circuit
- Time Path™ phasing plug
- Multi-angled housing
- Stacked, frequency-shaded woofers maintain vertical coverage angle down to 500 Hz with 120° (typical 180°); ideal for reverberant rooms
- Five 3/8"-16 hanging points

un unfinished
wh white
flying hardware
mounting hardware
RMD

EVI Vari Intense®

EVI-12

- Two-way, full-range loudspeaker
- High sensitivity
- Vented LF enclosure
- 1.25" voice coil (titanium diaphragm)
- PRO™ Driver protection circuit
- Time Path™ phasing plug
- Multi-angled housing
- Five 3/8"-16 hanging points

EVI-15

- Two-way, full-range loudspeaker
- High sensitivity
- Vented LF enclosure
- 1.25" voice coil (titanium diaphragm)
- PRO™ Driver protection circuit
- Time Path™ phasing plug
- Multi-angled housing
- Five 3/8"-16 hanging points

VI Horn

SPECIFICATIONS	EVI-12	EVI-15	EVI-28
Frequency range (-3 dB)	45 Hz–20 kHz	45 Hz–20 kHz	62 Hz–20 kHz
Recommended high-pass frequency	—	—	—
Sensitivity (SPL 1 W/1 m)	99.5 dB	100 dB	93 dB
Max. SPL/1m (calc.)	129 dB	129.5 dB	123.5 dB
Long-term power handling	250 W	250 W	250 W
Short-term power handling	1,000 W	1,000 W	1,000 W
Coverage (H° x V°)	60° x 65°	60° x 65°	65° x 65°
LF driver	12"	15"	2 x 8"
HF driver	1" (DH2010A)	1" (DH2010A)	1" (DH2010A)
Crossover frequency	2,000 Hz	2,000 Hz	2,000 Hz
Nominal impedance (minimum)	8 Ω	8 Ω	8 Ω
Input connections	screw terminal	screw terminal	screw terminal
Dimensions (H x W at front x D)	554 x 356 x 699 mm 21.8" x 14" x 27.5"	584 x 429 x 766 mm 23" x 16.9" x 30.2"	353 x 496 x 523 mm 13.9" x 19.5" x 20.6"
Net weight	21.8 kg (48 lbs)	24.0 kg (53 lbs)	16.3 kg (36 lbs)

EV Innovative Design

- Dual Woofers for extended bass, greater power handling and output.
- Coherent Coverage Waveguide Horn design on models 4.2 and 6.2.
- Dual Low-Frequency Ports provide extended bass output.
- Treated Woofer Cones for added weather resistance and increased reliability.
- Durable Zinc-Plated Steel Grille.
- Cast Aluminum Strong-Arm-Mount™ (SAM™) system provides excellent strength and reliability.
- Over 100 degrees of swing and 90 degrees of rotation for incredible installation flexibility.
- Simple Keyed Hex Head Adjustments make installations quick and easy.
- Titanium Dome Tweeters with Neodymium Magnet structures provide clean highs and added weather resistance.
- One-piece ABS Cabinet provides outstanding strength and acoustic rigidity.
- Smooth Lines and Innovative Cosmetic Design complement any décor or environment.
- Magnetically Shielded Transducers allow placement close to sensitive equipment.

Design goes audio...

"EVID products are an important part of the 'Fun Ship' entertainment experience for our guests. In addition to being visually appealing, EVID offers great sound and dependable performance, regardless of sea conditions."
Craig Palcisko, audio supervisor, Carnival Cruse Lines.

EVID 3.2/3.2T

- Two-way full range
- Vented LF enclosure
- 0.75" voice coil (titanium diaphragm) with Neodymium magnetic structure
- Full-bandwidth overload protection for HF and LF
- Three-dimensional ellipse (for compact look)
- Magnetically shielded for video applications
- Comes with Strong Arm Mount (SAM™) and a hex key
- Suspension insert for SAM™; safety point on rear side

EVID 4.2/4.2T

- Two-way full range
- Vented LF enclosure
- 1" voice coil (titanium diaphragm) with Neodymium magnetic structure
- HF section features Coherent Coverage Waveguide™ to minimize interference
- Full bandwidth overload protection for HF and LF
- Three-dimensional ellipse (for compact look)
- Magnetically shielded for video applications
- Comes with Strong Arm Mount (SAM™) and a hex-key
- Suspension insert for SAM™, safety point on rear side

EVID 6.2/6.2T

- Two-way, high-output full range
- Vented LF enclosure
- High sensitivity
- 1" voice coil (titanium diaphragm) with Neodymium magnetic structure
- HF section features Coherent Coverage Waveguide™ to minimize interference
- Full bandwidth overload protection for HF and LF
- Three-dimensional ellipse (for compact look)
- Magnetically shielded for video applications
- Comes with Strong Arm Mount (SAM™) and a hex key
- Suspension insert for SAM™; safety point on rear side

EVID 12.1

- Subwoofer
- Slot-loaded port design
- Dual-voice-coil, high-excursion transducer
- High sensitivity
- Built-in stereo crossover with high-pass output
- Trapezoidal
- Comes with mounting bracket (passed EIA 636 at a safety factor of 8:1) for on-wall or corner mounting
- One safety 3/8"-16 eyebolt included
- Suspension inserts and 2 x 3/8" hanging inserts
- Powered version (120v only) available

SPECIFICATIONS

	EVID 3.2/T	EVID 4.2/T	EVID 6.2/T	EVID 12.1
Frequency response (-10 dB)	85 Hz–20 kHz	65 Hz–20 kHz	62 Hz–20 kHz	40 Hz–140 Hz
Sensitivity (SPL 1 W/1 m)	87 dB	89 dB	94 dB	100 dB
Max. SPL/1m (calc.)	112 dB	115 dB	122 dB	128 dB
Long-term power handling	75 W	100 W	150 W	175/175 W
Short-term power handling	300 W	400 W	600 W	700/700 W
Transformer taps	70V: 5 W	70V: 3.75 W	70V: 7.5 W	—
(transformer version only)	100V: 10 W	70V/100V: 7.5 W, 15 W, 30 W	70V/100V:15 W, 30 W, 60 W	—
Coverage (H° x V°)	140° x 100°	120° x 80°	100° x 80°	—
LF driver	2" x 3.5"	2" x 4"	2" x 6"	12"
HF driver	0.75"	1"	1"	—
Nominal impedance (non-transformer version)	8	8	8	8
Minimum impedance (non-transformer version)	6	6	6	6
Input connections	spring terminal	spring terminal	spring terminal	spring terminal
Dimensions (H x W at front x D)	234 x 127 x 165 mm 9.2" x 5.1" x 6.5"	310 x 175 x 216 mm 12.2" x 6.9" x 8.5"	419 x 228 x 298 mm 16.5" x 9" x 11.75"	412 x 584 (at front) x 305 mm 16.25" x 23" x 12"
Net weight (incl. mounting bracket)	1.5 kg (3.3 lbs)	3.9 kg (8.5 lbs)	5.3 kg (12 lbs)	18.1 kg (40 lbs)
Shipping weight (pair)	3.9 kg (8.6 lbs)	8.6 kg (19 lbs)	12.3 kg (27 lbs)	20 kg (48 lbs)

Accessories

Premium Surface-Mount Speakers

Mounting Brackets

AB-34 and AB-64 360-degree Kits

The AB-34 and 64 series kits feature a 4-sided powder-coated steel mounting assembly that allows 4 EVID speakers to be mounted in an array to cover a 360-degree pattern. The mount offers additional flexibility in EVID system designs. The AB-34 works with the EVID 3.2 series and can be used with a threaded rod for suspension from the ceiling. The AB-64 is used with the EVID 4.2 or 6.2 series and can be used with a speaker stand tripod or hung from the ceiling using a threaded rod as shown. All necessary accessories and parts needed for use are included.

AB-32 and AB-62 180-degree Kits

The AB-32 and AB-62 series kits feature a 2-sided powder-coated steel mounting assembly allowing for 2 EVID speakers to be mounted in an array to cover a 180-degree pattern. The AB-32 works with the EVID 3.2 series and can be used with a threaded rod for suspension from the ceiling. The speakers can then be positioned on the bracket to cover a variety of patterns to best serve the installation requirements. The AB-62 allows the EVID 4.2 or 6.2 series speakers to be used with a speaker stand tripod or hung from the ceiling using a threaded rod as shown. All necessary accessories and parts needed for use are included.

Tabletop Stands

HS-3 Horizontal Tabletop Stand

The HS-3 horizontal tabletop stand allows the EVID 3.2 or 4.2 orientation on a table, meter bridge, desk, bookshelf or other flat surface. Ideal for portable applications, the stands are made of steel for strength and durability and include rubber feet to protect surfaces. Sold in pairs.

Other Accessories

TC Series Terminal Covers

The TC-4 and TC-6 terminal covers protect the input connections on the EVID speakers from the long-term effects of moisture. The covers are available for the EVID 4.2 and 6.2 series models. The covers easily attach to the rear input panel of the speaker and include a weatherproof cable connector.

MA-3 Mic Stand Adapter

The MA-3 is a microphone stand adapter that allows use of the EVID 3.2 with a standard boom mount microphone stand. Two adapter pieces allow a solid and secure junction between the microphone boom on one side and the microphone stand side on the other.

EVID Ceiling Speakers

The Intelligible Choice

No matter what the installation calls for, the new EVID ceiling speaker line can fill the need. Each model is unique and designed to meet the toughest "problem" job specifications. Sonically superior and esthetically pleasing, the EVID ceiling speaker line has no match. From the compact, powerful C4.2 to the exclusive waveguide-coupled design of the C8.2HC (patent pending) for high-ceiling environments; the EVID ceiling line will solve any installation requirement. All models meet NFPA/UL requirements for air handling spaces so they will be approved for any specification including emergency notification applications. The EVID ceiling speaker line was designed with the contractor and listener in mind. Great sound, simple installation, and exceptional value are all part of every model.

The key features

- Acoustically matched to the EVID surface mount speaker line
- Meets UL and NFPA regulations for air handling spaces
- Regardless of the acoustic and esthetic requirements there is an EVID ceiling monitor system to fit the requirements
- Solves any installation challenge
- Either 70V/100V or 8 ohm operation is standard on every model of the EVID ceiling speaker line. **No need to buy or stock special versions!**
- All installation accessories commonly needed for most jobs are included! No expensive add-ons are necessary!

EVID C4.2

Perfect for conventional rooms. Excellent bandwidth in an esthetically, unobtrusive installation profile. Its compact design fits in tight areas. Fully rated for use in air handling spaces. Its 4" woofer and waveguide coupled titanium coated dome tweeter give smooth, wide frequency response. The enclosure is ported and tuned to provide surprising bass response in such a compact package. Features an easy 3-point mounting system for quick installations. Comes complete with mounting support ring and tile rails. No additional accessories needed for most installations.

EVID C8.2

Never before has a ceiling speaker system delivered such a full range punch. Its specially tuned enclosure and 8" woofer provide amazing bass response. The 1" waveguide coupled tweeter give smooth controlled coverage out to 18 kHz. Perfect for installations where a flush-mount design is desired but demand for high quality audio exists. Features a 4-point mounting system which makes installations fast and easy. Comes complete with mounting support ring and tile rails. No additional accessories needed for most installations. A low-profile version (LP) is available for ceiling spaces with tight clearance.

EVID C8.2HC

The EVID C8.2HC is ideal for high ceiling and reverberant "problem" rooms. Its exclusive ported, waveguide-coupled 8" driver provides for excellent intelligibility and definition. The C8.2HC's patent pending design provides great coverage control throughout the voice range and above. No other speaker system provides the combination of excellent pattern control, wide bandwidth, high power handling and compact design like the C8.2HC. Features a secure 4-point mounting system which makes installations fast and easy. Comes complete with mounting support ring and tile rails. No additional accessories needed for most installations.

EVID C10.1

The C10.1 packs a large 10" subwoofer in a tuned high-performance enclosure to give amazing low frequency performance down to 45Hz! The C10.1 is one of the only quick-mount ceiling TRUE subwoofers available on the market. Flexible installation and powerful low-end performance make this an ideal companion to any EVID model. Features a secure 4-point mounting system which makes installations fast and easy. Comes complete with mounting support ring and tile rails. No additional accessories needed for most installations.

SPECIFICATIONS

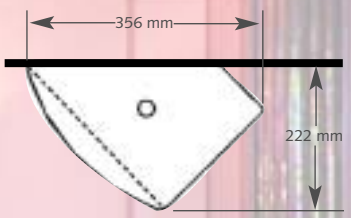
	EVID C4.2	EVID C8.2LP	EVID C8.2	EVID C8.2HC	EVID C10.1
LF Transducer	4"	8"	8"	8"	10"
	Polyprolylene cone	Polyprolylene cone	Polyprolylene cone	Polyprolylene cone +Waveguide	Polyprolylene cone
HF Transducer	19 mm (0.75")	25 mm (1")	25 mm (1")	25 mm (1")	
	Ti Mylar Laminate Dome	Ti Mylar Laminate Dome	Ti Mylar Laminate Dome	Ti Mylar Laminate Dome	
Frequency Response (-10 dB)	65 Hz - 20 kHz	50 Hz - 20 kHz	50 Hz - 20 kHz	50 Hz - 20 kHz	45 - 180 Hz
Power Handling(8 Ohms)	80 W (overload protected)	100 W (overload protected)	100 W (overload protected)	100 W (overload protected)	150 W
Coverage Pattern	130° conical	110° conical	110° conical	75° conical (@ >1 kHz)	180°
Sensitivity (1W/1m)	86 dB	91 dB	91 dB	93 dB	94 dB
Input Configuration	8 Ohms, 70 V, 100 V	8 Ohms, 70 V, 100 V	8 Ohms, 70 V, 100 V	8 Ohms, 70 V, 100 V	8 Ohms, 70 V, 100 V
Transformer Power Taps (W)	(1.88*), 3.75, 7.5, 15, 30	(1.88*), 3.75, 7.5, 15, 30	(1.88*), 3.75, 7.5, 15, 30	(7.5*), 15, 30, 60	(7.5*), 15, 30, 60
Dimensions (H x Dia.)	176 x 181mm 6.93" x 7.13"	178 x 270 mm 7.01" x 10.65"	255 x 270 mm 10.04" x 10.63"	303 x 320 mm 11.99" x 12.60"	303 x 320 mm 11.99" x 12.60"
Weight	2.7 kg (6.0 lbs.)	5.0 kg (11.0 lbs.)	5.0 kg (11.0 lbs.)	6.0 kg (13.2 lbs.)	7.0 kg (15.4 lbs.)
Acoustic Design		Ported cabinet, internally damped			Dual ported cabinet,
		Two-Way, inc. passive crossover			internally damped
Cabinet Construction		Steel enclosure and UL94V-0 rated baffle and bezel			
Mounting System		Integrated 3-point toggle anchors			
Grille Construction		Powder-coated steel			
Available Colors		White (paintable surface)			

***70 V only**

FRi / FRi+ Series

FRi Series brings premium EV components, including the DH2T compression driver and DL series woofers, to a new level of affordability. The FRi Series provides exceptional value where flexibility and performance is required in permanent installations. Suspension is achieved by using the numerous threaded mounting points. These allow flexible installation in any situation.

FRi systems are finished in black acrylic with 13-ply birch plywood and have a black powder-coated metal grille. Designed from the ground up for safe, attractive installations, FRi-122/64 and FRi-152/64 have the same 28-inch (711 mm) height as FRi-181S for uniform array appearance. FRi+ adds the performance of the large-format DH7 driver and the choice of more coverage pattern.



FRi-2082/28LPM

- 2-Way Full-range
- Vented LF enclosure
- 1″ voice coil (titanium diaphragm)
- Low-profile slanted design
- 45° angle allows underbalcony, on-wall and stage monitoring applications
- Only FRi-2082 comes with mounting bracket!
- 2 x 3/8″-16 suspension points

mounting hardware

RMD

wh white

Input-panel of a FRi-152/64

FRi-122/64/85

- 2-Way Full-range
- Vented LF enclosure
- 2″ voice coil (titanium diaphragm)
- Trapezoidal (15° per side)
- Comes with 4 eyebolts
- 12 x 3/8″-16 suspension points
- Hornnot rotatable in 85 version

FRi+122/64/66/94

- Two-way full-range loudspeaker
- Switchable between full range and biamp
- Vented LF enclosure
- 3″ voice coil (titanium diaphragm)
- Trapezoidal cabinet (15° per side)
- Comes with four eye bolts
- Twelve 3/8″-16 suspension points

flying hardware

Ω/Ω bi-amping

90° Horn rotatable

RMD

wh white

un unfinished

FRi / FRi+ Series

FRi-152/64/85

- 2-Way Full-range
- Solid bass down to 42 Hz (-10 dB) allows pure full-range performance
- Vented LF enclosure
- 2" voice coil (titanium diaphragm)
- Trapezoidal (15° per side)
- Comes with 4 eyebolts
- 12 x 3/8"-16 suspension points
- Hornnot rotatable in 85 version

FRi+152/64/66/94

- Two-way, full-range loud speaker
- Solid bass to 42 Hz (-10 dB) allows pure full-range performance
- Switchable between fullrange and biamp
- Vented LF enclosure
- 3" voice coil (titanium diaphragm)
- Trapezoidal cabinet (15° per side)
- Comes with four eyebolts
- Twelve 3/8"-16 suspension points

flying hardware
Ω/Ω bi-amping
90° Horn rotatable
RMD
wh white
un unfinished

FRi-181S

- Subwoofer
- Vented slot load design
- Built-in low-pass filter (switchable for biamp operation)
- Trapezoidal (7.5° per side)
- Comes with 4 eyebolts
- 16 x 3/8"-16 suspension points

flying hardware
dedicated for active X-over
RMD
wh white
un unfinished

SPECIFICATIONS

	FRi-2082	FRi-122/64/85 / FRi+122/64/66/94	FRi-152/64/85 / FRi+152/64/66/94	FRi+181S
Frequency Range (-10 dB)	55 Hz - 20 kHz	50 Hz - 15 kHz	42 Hz - 15 kHz	36 - 160 Hz
Recommended High-Pass Frequency	50 Hz (12 dB/Oct.)	50 Hz (12 dB/Oct.)	40 Hz (12 dB/Oct.)	36 Hz (12 dB/Oct.)
Axial Sensitivity SPL 1W/1m (Biamp mode)	93 dB	97 dB (97/112 dB)	98 dB (98/112 dB)	97 dB
Max. SPL /1 m (calc.); full space	122 dB	128 dB	129.5 dB	129 dB
Continuous Power Handling (Biamp op.)	200 W	300 W (300 W/60 W)	350 W (350 W/60 W)	400 W
Peak Power Handling (Peak)	800 W	1,200 W	1,400 W	1,600 W
Coverage (nominal -6 dB) (H° x V°)	100° x 100° (CD Horn)	60° x 40°/80° x 50° (FRi) 60° x 40°/60° x 60°/90° x 40°(FRi+)	60° x 40°/80° x 50° (FRi) 60° x 40°/60° x 60°/90° x 40°(FRi+)	300° x 270°
LF woofer (transducer)	50mm x 203 mm (2" x 8")(---)	304mm (12") (DL12BFH)	1391 mm (5") (DL15BFH)	457 mm (18")
HF throat diameter (transducer)	25 mm (1") (compr. driver)	25 mm (1") (DH2T)/1.4" (DH7) (FRi+)	25 mm (1") (DH2T)/1.4" (DH7) (FRi+)	---
Crossover Frequencies	2,800 Hz	1,600 Hz	1,600 Hz	130 Hz
Nominal Impedance (Biamp)	8 Ω	8 Ω (8 Ω/8 Ω)	8 Ω (8 Ω/8 Ω)	8 Ω
Input Connections	Barrier strips	Dual barrier strips	Dual barrier strips	Dual barrier strips
Dimensions (H x W at front x D)	222 x 620 x 356 mm 8.75" x 24.5" x 14"	711 x 401 x 445 mm 28" x 15.9" x 17.6"	711 x 483 x 589 mm 28" x 19" x 23.2"	711 x 597 x 762 mm 28" x 23.5" x 30"
Net Weight	18.2 kg (40 lbs.)	27.3 kg (60 lbs.)	31.8 kg (70 lbs.)	45.5 kg (100 lbs.)

FRX+ & FRX+PI-Systems

FRX+ Series loudspeakers are designed for applications in critical reverberant spaces where excellent directivity control is mandatory. Typical small-sized speaker systems are not able to maintain their rated coverage angles below 2000 Hz. Their wide beamwidth in the low midband is accompanied by serious degradation of speech intelligibility and clarity of music signals in such hostile environments.
EV´s FRX+ systems are troubleshooters concerning these problems, providing excellent wideband directivity control.
The all-horn-loaded, coaxial design comes up with sufficient radiation surface to enable narrow coverage angles down to 250 Hz at moderate cabinet sizes.
FRX+ 640/660/940 cabinets are texture-painted, 7-ply plywood with powder-coated steel grille backed with foam. FRX-122 has a cloth-covered grille.

For outdoor purposes, FRX+640/660/940 PI models are equipped with weatherized woofers, powder-coated stainless-steel grilles backed with multilayer foam and covered glandnut input panels.

FRX-122 horn aiming

FRX+ & FRX+PI-Systems

FRX+640 (60° x 40°)

FRX+660 (60° x 60°)

FRX+940 (90° x 40°)

Available as weather-resistant PI-Version

- Two-way, high-output, full-range loudspeaker
- High sensitivity: 101 dB/1W/1m (passive); 109 HF/105 LF
- Coaxial horn-loaded
- Vented LF horn enclosure
- 2" voice coil (titanium diaphragm)
- Trapezoidal cabinet (15° per side)
- L-Track hardware (top/bottom)
- Two single-stud Ancra® fittings included
- 3/8"-16 suspension point (rear)
- Same dimensions as FRX-181 for uniform array appearance
- PRO™ Driver protection circuit
- Time Path™ phasing plug
- Directivity to 500 Hz
- DX38 presets for excellent directivity control

flying hardware · Ω/Ω bi-amping · 90° Horn rotatable · RMD · wh white · un unfinished

FRX+181

- Subwoofer
- Direct-radiating vented design
- Trapezoidal cabinet (15° per side)
- L-Track hardware (top/bottom)
- Four single-stud Ancra® fittings included
- 3/8"-16 suspension point (rear)
- Same dimensions as FRX-640/660/940 for uniform array appearance
- Solid response to 35 Hz (-10 dB)
- Maximum crossover point of 800 Hz allows combinations with HP horns.
- Coverage angles are greater than 100° x 100° at 800 Hz

flying hardware · dedicated for active X-over · RMD · wh white · un unfinished

SPECIFICATIONS

	FRX-122	FRX+640	FRX+660	FRX+940	FRX+181
Frequency range (-3 dB)	75 Hz–20 kHz	50 Hz–20 kHz	50 Hz–20 kHz	50 Hz–20 kHz	43 Hz–1,000 Hz
Recommended high-pass frequency	—	—	—	—	35 Hz (12 dB/Oct.)
Sensitivity (SPL 1 W/1 m)	99 dB	105 dB	105 dB	105 dB	96 dB
Max. SPL/1m (calc.)	130 dB	133 dB	133 dB	133 dB	128 dB
Long-term power handling (biamped)	300 W (300 W/60 W)	400 W (400 W/60 W)	400 W (400 W/60 W)	400 W (400 W/60 W)	400 W
Short-term power handling	1,200 W	1,600 W	1,600 W	1,600 W	1,600 W
Coverage (H° x V°)	110° x 55° (asym. CD Horn)	60° x 40°	60° x 60°	90° x 40°	omni
Directivity Index	10.4 dB (+2.3/-1.6 dB) 800 Hz–16 kHz	14.1 dB (+1.9/-3.5 dB) 500 Hz–16 kHz	13.7 dB (+2.5/3.3 dB) 500 Hz–16 kHz	13.4 dB (+2.9/-3.2 dB) 500 Hz–16 kHz	3.8 dB 50 Hz–200 Hz
LF driver	12" (DL12BFH)	15" (DL15)	15" (DL15)	15" (DL15)	18" (DL18MT)
HF driver	1" (DH2T)	1" (DH2T)	1" (DH2T)	1" (DH2T)	—
Crossover frequencies (passive mode)	1,800 Hz	1,800 Hz	1,800 Hz	1,800 Hz	—
Nominal impedance (biamped)	8 Ω (8 Ω/8 Ω)	8 Ω (8 Ω/8 Ω)	8 Ω (8 Ω/8 Ω)	8 Ω (8 Ω/8 Ω)	8 Ω
Input connections	Neutrik®/barrier strips	Dual barrier strips	Dual barrier strips	Dual barrier strips	Dual barrier strips
Dimensions (H x W at front x D)	584 x 451 x 229 mm 23" x 17.8" x 9"	787 x 719 x 660 mm 31" x 28.3" 26"	787 x 719 x 660 mm 31" x 28.3" 26"	787 x 719 x 660 mm 31" x 28.3" 26"	787 x 719 x 660 mm 31" x 28.3" 26"
Net weight	20.9 kg (49 lbs.)	68.95 kg (152 lbs.)	68.95 kg (152 lbs.)	68.95 kg (152 lbs.)	45.5 kg (105 lbs.)

MH-Series Stadium Horns

MH-Series stadium horns are designed for large-scale stadiums and arenas where high-fidelity sound and directivity control from low mid-bass frequencies and below are absolutely essential. In 1974, EV pioneered the concepts of constant directivity (horn angles that are constant with frequency) and Manifold® technology (which combines the outputs of multiple transducers into one source). Large-format MH horns incorporate both in several horn/driver systems. Medium-format MH horns are excellent for short/medium throw applications or as infills for large-format MH-horns.

Medium-format MH-Series horns

MH medium-format horns have a high Q and uniform directivity control down to 500 Hz. The mid-bass section features an Aperiodic Enhancer™ phase plug which extends the high-end output to blend seamlessly into the coaxial high-frequency section. The HF section contains a small-format HP horn with EV's patented Transplanar™ design to provide exceptionally smooth frequency response. The one-piece main horn bell is a black polyester/fiberglass laminate with composite reinforcement. Up to three pieces can be paralleled in active or passive mode without a minimum impedance load at the amplifier.

- Two-way, extraordinary output mid/high CD horn system
- High sensitivity: 107 dB/1 W/1 m
- Coaxial horn-loaded
- P version has passive crossover
- Water-resistant Kevlar® epoxy cone
- MB horn features Aperiodic Enhancer™ phase plug
- 2" voice coil (titanium diaphragm)
- HF driver protection circuit
- Uniform directivity control to 500 Hz
- All models have same dimensions for uniform-looking arrays
- Integral 4-point hanging hardware in polyester-powder-coated steel

SPECIFICATIONS	MH640AC/AP	MH660AC/AP	MH940AC/AP
Frequency range (-3 dB)	150 Hz–20 kHz	150 Hz–20 kHz	150 Hz–20 kHz
Recommended high-pass frequency	160 Hz (24 dB/Oct.)	160 Hz (24 dB/Oct.)	160 Hz (24 dB/Oct.)
Sensitivity (SPL 1 W/1 m)	107/111 dB; 107 dB	107/111 dB; 107 dB	107/111 dB; 107 dB
Max. SPL/1m (calc.)	138 dB	138 dB	138 dB
Long-term power handling	300 W/60 W; 300 W	300 W/60 W; 300 W	300 W/60 W; 300 W
Short-term power handling	1,200 W/240 W; 1,200 W	1,200 W/240 W; 1,200 W	1,200 W/240 W; 1,200 W
Coverage (H° x V°)	60° x 40° (CD Horn)	60° x 60° (CD Horn)	90° x 40° (CD Horn)
Directivity Index (500 Hz–20 kHz)	13.7 dB (+1.6/-2.8 dB)	13.7 dB (+1.6/-2.8 dB)	12.6 dB (+3.8/-4.0 dB)
LF driver	10" (DL10X)	10" (DL10X)	10" (DL10X)
HF driver (voice coil)	2"(DH2T)	2"(DH2T)	2"(DH2T)
Crossover frequencies (slope in biamp mode)	1,600 Hz (24 dB/Oct.)	1,600 Hz (24 dB/Oct.)	1,600 Hz (24 dB/Oct.)
Nominal impedance	16 Ω/8 Ω; 8 Ω	16 Ω/8 Ω; 8 Ω	16 Ω/8 Ω; 8 Ω
Input connections	Dual barrier strips	Dual barrier strips	Dual barrier strips
Dimensions (H x W at front x D)	686 x 686 x 711 mm 27" x 27" x 28"	686 x 686 x 711 mm 27" x 27" x 28"	686 x 686 x 711 mm 27" x 27" x 28"
Net weight (Large format: without HF driver)	27.2 kg (60 lbs.)	27.2 kg (60 lbs.)	27.2 kg (60 lbs.)

MH-Series Stadium Horns

Large-format MH-horns

MH large-format horns feature Manifold® technology, have a high "Q" and uniform directivity control. Because of their large mouth size, MH horns maintain their beamwidth to very low frequencies – down to 250 Hz – reducing bass "spillover" and increasing intelligibility. The HF-section contains an appropriate medium-format HP-horn that accepts EV two-inch-exit single or dual drivers of the designer´s choice, extending response to 20.000 Hz. HF drivers must be ordered separately. The dual driver doubles HF output, important for very long throws. N/DYM® drivers offer the ultimate output in the upper octaves, important when contemporary music is to be heard over long distances. The large horn size also provides frequency response to 100 Hz, typically eliminating the need for supplemental low-frequency systems. The mid-bass section features Aperiodic Enhancer™ phase plug. It is responsible for the extended high-frequency response of the mid-band section. It makes use of the fact that only the apex of the cone (near the voice coil) is in motion at higher frequencies, and automatically adjusts the acoustic loading to maximize acoustic output.
The main horn bell is a one-piece black polyester and fibreglass with fibreglass rib reinforcement. An integral grille-protection screen built into the manifold chamber protects the mid-bass for mechanical damage. To get low-frequency extension one octave lower, the recommended subwoofer is QRx 218 S.

MH 4020 AC (40° x 20°)

MH 6040 AC (60° x 40°)

MH 9040 AC (90° x 40°)

weather resistant

flying hardware

dedicated for active X-over

RMD

- 2-way coaxial horn-loaded system
- Very high sensitivity
- Very high maximum SPL
- Full-range down to 100 Hz (-10 dB)
- Mid-Bass section features Aperiodic Enhancer™ and Manifold® Technology
- Water resistant (incl. Kevlar® epoxy cone)
- HF-horn with 2-inch throat diameter (Driver is of the designer´s choice)
- Excellent uniform directivity control down to low frequencies
- Same front dimensions for uniform appearance when used in arrays
- Integral 18-point hanging hardware in polyester-powder-coated steel for flexible mounting

SPECIFICATIONS	MH 4020 AC	MH 6040 AC	MH 9040 AC
Frequency Range (-10 dB)	100 - 20.000 Hz	100 - 20.000 Hz	100 - 20.000 Hz
Recommended High-Pass Frequency	130 Hz (24 dB/Oct.)	130 Hz (24 dB/Oct.)	130 Hz (24 dB/Oct.)
Axial Sensitivity SPL 1W/1m	109 dB	107 dB	105 dB
Max. SPL / 1m (calc.); full space	146 dB	141 dB	139 dB
Long-Term Power Handling (Mid-Bass)	1.200 W	600 W	600 W
Short-Term Power Handling (Peak) (Mid-Bass)	4.800 W	2.400 W	2.400 W
Coverage (nominal -6 dB) H° x V°	40° x 20° (CD Horn)	60° x 40° (CD Horn)	90° x 40° (CD Horn)
Directivity Index (500 - 20.000 Hz)	18.0 dB (---/---)	13.8 dB (+0.9/-1.1 dB)	10.2 dB (+0.9/-1.1 dB)
LF woofer (transducer)	4 "x 10" (DL10X-SH)	2" x 10" (DL10X-SH)	2" x 10" (DL10X-SH)
HF throat diameter (horn typ)	2" (HP420A)	2" (HP640)	2" (HP940)
Crossover Frequencies (slope)	1.600 Hz (24 dB/Oct.)	1.250 Hz (24 dB/Oct.)	1.250 Hz (24 dB/Oct.)
Nominal Impedance (mid-bass)	2 x 8 Ω	8 Ω	8 Ω
Minimum Impedance (mid-bass)	2 x 3.1 Ω	5.9 Ω	5.9 Ω
Input Connections	heavy-duty copper cable	heavy-duty copper cable	heavy-duty copper cable
Dimensions (H x W at front x D)	1500 x 991 x 1880 mm 59' x 39' x 73.9"	1500 x 991 x 1873 mm 59" x 39" x 73.9"	1500 x 991 x 1534 mm 59" x 39" x 60.4"
Net Weight (without HF-driver)	108 kg (237 lbs.)	75 kg (165 lbs.)	75 kg (165 lbs.)

PLASMA P1 & P2

PLASMA™ P1 Plasma P1's compact, ergonomically designed enclosure houses an EVX155RMD, Kevlar™-reinforced 15″ LF transducer driven by a 4″ voicecoil for well-defined transients and articulate vocals at all SPLs. The EV ND-6 neodymium HF compression driver with a 3″ voicecoil coupled to an EV 80° x 55° horn provides extended HF response with very low distortion. A two-channel class-H amplifier provides a total of 700 watts of power but requires NO fan, permitting quiet operation, low maintenance, and long-term reliability. Coupled with signal processing for linear acoustic response, Plasma P1 delivers dynamic linearity to very high SPLs. Equipped with three L-track attachment points, Plasma can also be used with its proprietary PSA-V™ (Plasma Strong-Arm-Mount-Vertical) mounting system for easy flying and precise aiming. The multi-angle enclosure is available in left and right versions, thus allowing a 55° monitor angle onstage and mirror-image monitoring.

PLASMA™ P2 Plasma P2 represents a new generation of high-powered compact subwoofers. Designed to extend the very low frequency response of Plasma P1, it uses a class H-design amplifier driving an EVX180B 18″ woofer. The patented LPN™ (Low-Pass-Notch) filter compensates for transient distortion in dynamic signals (such as kickdrums) to achieve a higher acoustic output and more punch than expected from such a compact enclosure.

PLASMA P1 (80° x 55°)

- 15″ 2 - Way Powered
- 80 °x 55° Speaker System
- Compact, ergonomically designed cabinet
- 550 W + 150 W dynamic output power
- 132 dB maximum SPL
- EVX155RMD 15″ LF transducer
- ND6 HF compression driver
- Simple, versatile suspensions with PSA-V™ (Plasma Strong-Arm-Mount-Vertical)

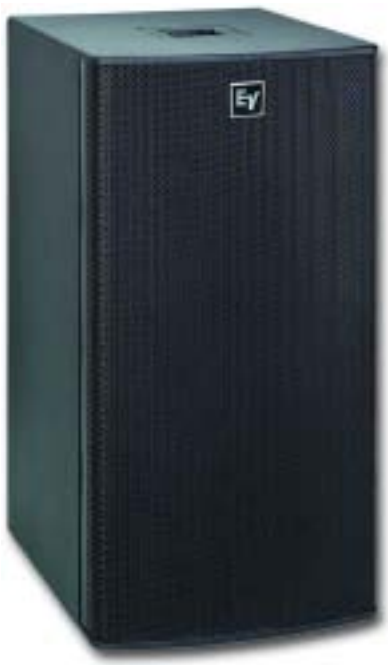
POWERED

PLASMA P2

- 18″ powered subwoofer
- Compact, ergonomically designed cabinet
- 800W dynamic output power
- EVX180B direct radiating 18″ woofer
- 132 dB maximum SPL
- Extended bass response
- Integrated heavy-duty casters for easy transport

SPECIFICATIONS

	PLASMA P1	PLASMA P2
Frequency Response (-3 dB)	45 Hz - 17 kHz	40 Hz - 100 Hz
Frequency Range (-10dB)	38 Hz - 19 kHz	30 Hz - 110 Hz
Calc. Max SPL	132 dB	132 dB
Horizontal Coverage	80°	-
Vertical Coverage	55°	-
Amplifier Design	Class H	Class H
THD	<0.01%	<0.05%
Input Impedance	20 kOhms	20 kOhms
LF Amplifier Power	460W RMS (550W Peak)	550W RMS (800W Peak)
HF Amplifier Power	140W RMS (150W Peak)	-
High Pass Crossover (switchable)	100 Hz	
Level Control	-∞ to +6 dB	-∞ to +6 dB
Input Sensitivity	+ 6 dB for full output	+ 6 dB for full output
LF Transducer	381mm (15") EVX155RMD	460mm (18") EVX180B
HF Transducer	35,6 mm (1.4") exit ND6 compression driver	-
Connectors:		
Balanced Line Inputs	XLR and 1/4" phone Combination	XLR and 1/4" phone Combination
Balanced Output	XLR	XLR
Power Requirement	100, 120, 230 or 240 VAC 50-60 Hz	100, 120, 230 or 240 VAC 50-60 Hz
Enclosure Material	13-ply Birch Plywood	13-ply Birch Plywood
Cabinet Finish	Futura	Futura
Grille	Powder-Coated Steel with cloth	Powder-Coated Steel with cloth
Dimensions (H x W x D) :	615 x 475 x 400 mm 24.2" x 18.8" x 15.7"	910 x 476 x 600 mm 25.8" x 18.8" x 23.6"
Net Weight	42,3 kg (93 lbs)	63,6 kg (140 lbs)



QRx Series

Not even three years on the market, EV's QRx Series loudspeakers have become the go-to systems for contractors, regional sound companies, and anyone who wants to step up to high-end pro audio without blowing the budget. With integated L-track rigging points on top and bottom, the QRx cabinets are easy to fly. The unique, asymmetrical, fully rotatable horn provides a 15-degree down angle to ensure HF coverage where needed, while avoiding acoustic spill. EV's powerhouse DH7 large-format driver (3" voicecoil, 1.4" exit) provides the HF engine, while a selection of EV's DL and EVX woofers anchor the LF and sub frequencies. EV's combination of high-level components and unique design make the QRx Series one of the best and most versatile values in the industry.

Easy operation mode selection

QRx 112/75

- 2-Way High-Output Full-range
- High Sensitivity
- Ultra-linear frequency response
- Solid bass down to 52 Hz (-10 dB)
- Vented LF enclosure
- Asymmetric CD-horn aimed downward by 10°
- 3.1" voice coil (titanium diaphragm)
- Protection circuits for HF-driver and LF-woofer
- Easy external operation mode selection
- 5-side multi-angled housing with monitor slant

QRx as monitor

QRx 115/75

- 2-Way High-Output Full-range
- High Sensitivity
- Ultra-linear frequency response
- Solid bass down to 50 Hz (-10 dB)
- Vented LF enclosure
- Asymmetric CD-horn aimed downward by 10°
- 3.1" voice coil (titanium diaphragm)
- Protection circuits for HF-driver and LF-woofer
- Easy external operation mode selection
- 5-side multi-angled housing with monitor slant
- Same front width as QRx 118 S

QRx 212/75 / QRx 2121H/75

- 2-Way Highest-Output Full-range
- High Sensitivity
- Ultra-linear frequency response
- Extended bass response down to 50 Hz (-10 dB)
- Vented LF enclosure
- Asymmetric CD-horn aimed downward by 10°
- 3.1" voice coil (titanium diaphragm)
- Protection circuits for HF-driver and LF-woofers
- Easy external operation mode selection
- Trapezoidal (10° per side)

QRx 153/75

- Three-way, high-output, full-range loudspeaker
- Biamp only
- Solid bass to 42 Hz (-10dB)
- Vented LF enclosure
- Asymetrical CD horn aimed downward by 10°
- 3″ HF voice coil (titanium diaphram)
- Protection circuit for HF driver
- Trapezoidal cabinet (15° per side) for tight-pack situations
- Comes with L-track hardware and single-stud ancra fittings

dedicated for active X-over

wh white

un unfinished

QRx 153/75

QRx 218 S

QRx 118 S

- Subwoofer
- Direct radiating vented design
- High Sensitivity
- Solid bass down to 30 Hz (-10 dB)
- Rectangular
- Equipped with shown features below

dedicated for active X-over

wh white

un unfinished

QRx 118 S

QRx 218 S

- Subwoofer
- Direct radiating vented design
- High Sensitivity
- Solid bass down to 31 Hz (-10 dB)
- Rectangular
- Also perfect in combination with large HP and MH horns
- Equipped with shown features below
- Flyable version available

flying hardware

dedicated for active X-over

wh white

un unfinished

P 1202 controller amp configured with QRx modules

QRx subwoofer features

Rubber feet

The dedicated amps for QRx series are the Precision Series™ controller amplifiers. They guarantee maximum performance, ultralinear frequency response, and optimized operation safety on the strength of EV´s dynamic limiter and VCP (voice coil protection).

SPECIFICATIONS	QRx112/75	QRx115/75	QRx153	QRx(H) 212/75	QRx118 S	QRx218S
Frequency Range (-10 dB)	52 Hz - 18 kHz	45 Hz - 15 kHz	42 Hz - 20 kHz	50 Hz - 15 kHz	38 - 250 Hz	35 - 250 Hz
Frequency Range (-3 dB) with controller amp	46 Hz - 18 kHz	48 Hz - 18 kHz	50 Hz - 16 kHz	43 Hz - 18 kHz	36 - 130 Hz	35 - 135 Hz
Recommended High-pass frequency	45 Hz (12 dB/Oct.)	45 Hz (12 dB/Oct.)	—	45 Hz (12 dB/Oct.)	36 Hz (12 dB/Oct.)	35 Hz (12 dB/Oct.)
Recommended controller module (P-Series amp)	M-112	M-115	M-153	M-212	M-118S	M-218S
Axial Sensitivity SPL 1W/1m (Biamp operation)	98 dB (100/112 dB)	98 dB (101/112 dB)	98/105 dB —	102 dB (102/112 dB)	98 dB —	99 dB —
Max. SPL / 1m (calc.); full space	131 dB	130 dB	130 dB	136 dB	133 dB	139 dB
Continuous Power Handling	300 W (300 W/75 W)	400 W (400 W/75 W)	400 W/150 W/150 W	600 W (600 W/75 W)	600 W	1,200 W
Peak Power Handling (Biamp)	1,200 W (1,200/300 W)	1,600 W (1,600/300 W)	1,600 W/600 W/600 W	2,400 W (2,400/300 W)	2,400 W	4,800 W
Coverage (nominal -6 dB) H° x V°	75° x 50° (asym. CD horn)	75° x 50° (asym. CD horn)	75° x 50° (asym. CD horn)	75° x 50° (asym. CD horn)	essentially omni	essentially omni
LF woofer (transducer)	12″ (DL12BFH)	15″ (DL15ST)	15″ (DL15ST)	2 x 12″ (DL12BFH)	18″ (EVX-180B)	2 x 18″ (EVX180B)
VC diameter	3″ (DH7)	3″ (DH7)	8″ MF8 MF/ 3″ DH7 HF	3″ (DH7)	---	---
Crossover Frequencies (slope in Biamp mode)	1,500 Hz (24 dB/Oct.)	1,500 Hz (24 dB/Oct.)	1,200 Hz	1,500 Hz (24 dB/Oct.)	100 Hz (24 dB/Oct.)	100 Hz (24 dB/Oct.)
Nominal Impedance (Biamp mode)	8 Ω (8 Ω/8 Ω)	8 Ω (8 Ω/8 Ω)	8 Ω/12 Ω/12 Ω	4 Ω (4 Ω/8 Ω)	8 Ω	4/8 Ω
Input Connections	2 Neutrik® NL4	2 Neutrik® NL4	2 Neutrik® NL4	2 Neutrik® NL4	2 Neutrik® NL4	2 Neutrik® NL4
Dimensions (H x W at front x D)	675 x 390 x 372 mm 26.6″ x 15.36″ x 14.77″	759 x 450 x 407 mm 29.9″ 17.72″ x 16.02″	1,240 x 467 x 485 mm 41.5″ x 18.4″ x 19.12″	990 x 390 x 375 mm 38.98″ x 15.47″ x 14.77″	760 x 450 x 677 mm 29.9″ x 17.74″ x 26.63″	1,015 x 560 x 599 mm 40″ x 22.05″ x 23.6″
Net Weight (subs without wheel kit)	26.0 kg (58 lbs.)	32.0 kg. (71 lbs.)	47 kg (97 lbs.)	36.5 kg. (80 lbs.)	47.5 kg (100 lbs.)	68 kg (150 lbs.)

ZX5

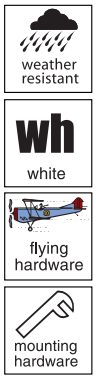
The Advanced Generation of Versatile, High-Performance Lightweight Speakers

Founded on more than 20 years of experience in building professional lightweight loudspeakers based on polypropylene enclosures and high-end components, ZX loudspeakers comprise a new family that includes all of EV's expertise in sound reinforcement for mobile and fixed install business.

Incorporating brand-new, high-power series woofers and drivers, the new elegant style molded cabinets combine mechanical solutions for all permanent installation and mobile stage application demands.

ZX5 family features

- DVX-3150 : New high-power 15" woofer
- ND2 : New 2" voicecoil Neodymium compression driver
- New asymmetrically molded polypropylene enclosure
- Internal passive crossover
- 10 x metric inserts (M8)
- 3 Ancra single-stud fittings (5 attachment points)
- Integrated pole-mount adaptor
- Powder-coated full-face steel grille backed with foam
- Standard floor monitor angle 45°, adjustable to 55° with integrated monitor feet



ZX5 is available as 90° x 50° or 60° x 60°, in black or white finish. Both horn patterns are also for outdoor use, these black PI versions come up with powder-coated stainless steel grilles and waterproof glandnut input panels with SJO cable.

Product Matrix

Model	Pattern (H x V)	Color	Weather-resistant IP44
ZX5-90B	90° x 50°	black	
ZX5-60B	60° x 60°	black	
ZX5-90W	90° x 50°	white	
ZX5-60W	60° x 60°	white	
ZX5-90PI	90° x 50°	black	X
ZX5-60PI	60° x 60°	black	X

SPECIFICATIONS*

	ZX5-60 (B, W & PI Versions)	ZX5-90 (B, W & PI Versions)
Frequency range (+/-3 dB)	52-16 kHz	
Recommended Hi-Pass Frequency	36 Hz	
Axial sensitivity SPL 1W/1m (Biamp mode)	99 dB	
Maximum SPL (calc.); full space	133 dB	
Long Term Power Handling	600 W	
Short Term Power Handling (Peak), low Z	2,400 W	
Coverage, H° x V° (nominal -6 dB)	60° x 60°	90° x 50°
LF transducer	15" DVX-3150	
HF transducer	2" ND2	
Crossover Frequencies	1.500 Hz	
Nominal Impedance	8 Ohms	
Minimum Impedance	6.5 Ohms	
Input Connections	2 x four-pin Speakon / glandnut SJO cable (PI versions)	
Dimensions (H x W at front x D)	692 x 446 x 411 mm (27.24" x 17.56" x 16.18")	
Net Weight	22.5 kg (49.6 lbs.)	

Sx-Series™

For the last twenty years, EV's Sx Series loudspeakers have been the industry standard for lightweight, high-performance loudspeakers, a standard against which all others are measured. Their versatility is reinforced by their rich portfolio of accessories, from wall-mount and array brackets to monitor feet and transport bags. The Sx series has powered everything from local wedding bands to the clogs of "Riverdance" to football games at Notre Dame Stadium, and the new Sx600 dominates the stadiums at the 2004 Olympic Summer Games in Athens, Greece.

Sx 80/PI/PIX

PI version

- 2-Way Full-range
- Vented LF enclosure
- 1" voicecoil (titanium diaphragm)
- PRO™ Driver protection
- HF-horn features Varipath™
- Trapezoidal
- Compact dimensions
- 7 x M6 and 4 x M5 inserts
- For overview of variants, see chart at right
- PIX (70V/100V)

Sb 121

- Subwoofer
- Direct radiating vented design
- Trapezoidal (25° per side)
- Recommended low-pass between 100 Hz - 200 Hz (12dB/Oct.)
- 4 x M8x1.25 attachment points

Sx 100 +

- 2-Way Full-range
- Vented LF enclosure
- 1.25" voice coil (titanium diaphragm)
- PRO™ Driver protection circuit
- HF-horn features Varipath™
- Trapezoidal (25° per side)
- Physical characteristics of Sx 300 with slightly lower sensitivity
- 4 x M8x1.25 attachment inserts

Sx 300/PI/PIX

- 2-Way Full-range
- High Sensitivity
- Ultra-linear frequency response
- Vented LF enclosure
- 1.25" voice coil (titanium diaphragm)
- PRO™ Driver protection circuit
- HF-horn features Varipath™
- Trapezoidal (25° per side)
- 4 x M8x1.25 attachment inserts
- Overview of variants see right spread sheet
- Sx300 PI outdoor version
- Sx300 PIX for 70V/100V

Sx 250

- 2-Way Full-range
- Extended bass response
- 15" DL-Woofer
- 1.25" titanium diaphragm
- 80 x 55 degree horn pattern
- 18mm plywood enclosure
- Rugged FUTURA™ finish
- Five sided, multi-angle cabinet
- Built-in stand mount
- Suspendable using optional SK-1 kit

Sx 500 +

- 2-Way High-Output Fullrange
- High sensitivity
- Short horn-loaded, vented LF enclosure
- Asymmetric CD horn aimed downward by 10°
- 2" voice coil (titanium diaphragm)
- PRO™ Driver protection circuit
- HF horn features Varipath™
- Operation mode by pin arrangement
- Multi-angled array housing
- 8 x M8 x 1.25 attachment points

Sx 500 PI +

- Weatherproofed version of Sx 500+ for outdoor applications
- Weather-resistant woofer
- Polyester-mesh water shield
- Comes with foam part plugs for increased water resistance

Sx600 PI/PIX

- Two-element vertical line array
- For highest output outdoors
- Very high sensitivity (105 dB/1W/1m)
- High intelligibility
- Two 12" woofers
- DH2T driver on 65° x 65°Varipath horn
- All-weather cabinet
- SuperSAM mounting, 60° x 180° adjustable
- Waterproof connection by SJO cable with gland nut
- Internal 600 W transformer available (SX600PIX)

Feature overview for Sx-Series™

	flying hardware	mounting hardware	wh white	70/100 V	weather resistant	Ω/Ω bi-amping	RMD	input connectors
Sx 80 B/W	X	X	X				X	push-pins
Sx 80 BE	X	X					X	Speakon
Sx 80 TB/TW	X	X	X	1.9/3.8/7.5/ 15/30/60 W			X	covered barrier strip
Sx 80 PI	X	X				X	X	covered barrier strip
Sx 80 PIX	X	X		1.9/3.8/7.5/ 15/30/60 W	X		X	covered barrier strip
Sx 100 + E/W	X	X	X		X		X	2 Speakon
Sx 300 E/EW	X	X	X		X		X	2 Speakon
Sx 300 PI	X	X			X	X	X	2 Speakon
Sx 300 PIX	X	X		100/140/200W (100V taps)	X		X	2 Speakon (100V taps via Pin arangement)
Sx 500 +	X	X				X	X	Speakon
Sx 500 PI +	X	X			X	X	X	Speakon
Sx600(PI)		X			X		X	Connectors (SJO cable with gland nut)
SX600PIX		X		X	X		X	Connectors (SJO cable with gland nut)
Sb 121	X	X					X	Speakon

SPECIFICATIONS	Sx 80	Sx 100 +	Sx 300	Sx 250	Sx 500+	Sx600PI	Sb 121
Frequency Range (-10 dB)	51 Hz - 20 kHz	50 Hz - 20 kHz	50 Hz - 20 kHz	50 Hz - 20 kHz	43 Hz - 20 kHz	100 Hz - 18 kHz	45 - 600 Hz
Recommended High-Pass Frequency	---	---	---	45 Hz (12 dB/Oct.)	43 Hz (12 dB/Oct.)	80 Hz	48 Hz (12 dB/Oct.)
Axial Sensitivity SPL 1W/1m (Biamp mode)	92 dB	98 dB	100 dB	99 dB	100 dB	105 dB	95 dB
Max. SPL / 1m (calc.); full space	121 dB (100V: 110 dB)	127 dB	131 dB (100V: 123 dB)	130 dB	132 dB	138 dB	126 dB
Long-Term Power Handling (low Z) (100V resp. Biamp)	175 W (60 W/100V)	200 W	300 W (200 W/100V)	350 W	400 W	600 W	300 W
Short-Term Power Handling (Peak), low Z	700 W	800 W	1,200 W	1,400 W	1,600 W	2,400 W	1,200 W
Coverage (nominal -6 dB) H° x V°	90° x 65° (CD Horn)	65° x 65° (CD Horn)	65° x 65° (CD Horn)	80° x 55°	75° x 60°	65° x 65°	essentially omni
Directivity Index (800 - 16.000 Hz)	9.2 dB (+2.3/-3.9 dB)	11.1 dB (+2.4/-4.1 dB)	11.1 dB (+2.4/-4.1 dB)	11.6 dB (+3.0/-6.9 dB)	15.2 dB (+3.0/-6.9 dB)	11.3 dB	---
LF woofer (transducer)	8" (---)	12" (---)	12" (DL12BFH)	15"(DL15BFH)	15"(DL15ST)	2 x 12" (ND12,DL12BFH)	12" (DL12BFH)
HF throat diameter (transducer)	1" (DH2005)	1" (DH2010A)	1" (DH2010A)	1"(DH2010A)	1"(DH2T)	1"(DH2T)	
Crossover Frequencies	2,200 Hz	1,500 Hz	1,500 Hz	1,600 Hz	1,600 Hz	1,800 Hz	---
Nominal Impedance (non-transformer)	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	4 Ω	8 Ω
Minimum Impedance (non-transformer)	7.2 Ω	5.6 Ω	6.0 Ω	5.2 Ω	5.2 Ω	3.5 Ω	6.0 Ω
Input Connections	see above	see above	2 four-pin Speakon	2 four-pin Speakon	2 four-pin Speakon	SJO cable/gland nut	2 four-pin Speakon
Dimensions (H x W at front x D)	400 x 292 x 222 mm 15.75" x 11.5" x 8.75"	586 x 429 x 312 mm 23.07" x 16.89" x 12.28"	586 x 429 x 312 mm 23.07" x 16.89" x 12.28"	625 x 431 x 330 mm 24.6" x 16.97" x 12.99"	838 x 673 x 448 mm 32.99" x 26.5" x 17.64"	1163 x 429 x 312 mm 45.79" x 16.89" x 12.28"	586 x 429 x 312 mm 23.07" x 16.89" x 12.28"
Net Weight	8.2 kg (T/PIX: 9.3 kg) 18.1 lbs. (T/PIX: 20.5 lbs.)	14.5 kg 32 lbs	17.7 kg (PIX: 21.7 kg) 39 lbs. (PIX: 47.8 lbs.)	18.1 kg 39.9 lbs.	31.3 kg 69 lbs.	36.3 kg 80 lbs.	14.6 kg 32.2 lbs.

SxA Series

SxA100+

Versatile 12", 2-way powered speaker

- Very compact, lightweight, robust polypropylene enclosure
- Real fullrange 55 Hz – 20k Hz for front-of house or monitor (with F200 monitor adaptor)
- Biamped with 350 W plus 80 W peak power for a very dynamic musical response
- Mixable microphone and line inputs with a 2-band EQ
- 65° x 65° CD horn from the famous Sx 300 for an outstanding acoustic performance
- Fully compatible with Sx mounting hardware and accessories
- Pole-mount adaptor

SxA100+ / SXA360

SxA250

Compact 15", 2-way powered speaker

- 7-ply plywood enclosure with Futura™ cover; extremely scratch resistant
- 5-side enclosure with 45° monitor angle
- True fullrange (55Hz – 20kHz) for front-of-house or monitor applications
- Biamped at 350W plus 80W peak power for a very dynamic musical response
- Mixable microphone and line inputs and a 2-band EQ
- EV DL15 woofer with cast aluminium frame
- DH2010A 1.25" driver with 80° x 55° CD horn
- Pole-mount adaptor

SxA250

SxA360

The lightweight power package

- 129 dB SPL max. from a 36.6-lb. powered speaker
- 55 Hz - 20 kHz bandwidth for front-of-house or monitor
- DH2T 2" driver on 65° x 65° CD horn
- Built-in pole-mount adaptor
- Built-in two-way amplifier: 350 W(LF)/150 W(HF) output power
- Fits all Sx300 mounting accessories
- Line in and loop thru via XLR
- PowerCon AC power connector

SbA760

Powered subwoofer

- 760 W amplifier power
- Compact, ergonomic design for easy transportation
- 15" EVS15 woofer
- Built-in stereo crossover with PowerMax12 filter
- LPN filter for extended bass response
- Dynamic Limiter and full protection package
- Integrated pole mount
- Futura™-covered, four-wheeled cabinet

Sb760

SPECIFICATIONS

	SxA100+	SxA250	SxA360	SbA760
Frequency Response (-10dB)	55Hz to 20kHz	55Hz to 20kHz	60Hz to 18kHz	45 Hz - 150 Hz
Rated Output Power				760 W
long term	LF150/HF 50Watts	LF150/HF 50Watts	LF350W/HF 150Watts	
10ms burst	LF350W/HF 80W	LF350W/HF 80W		
Max. Sound Pressure Level	124 dB	126 dB	129 dB	128 dB
HF Coverage (nominal)	65° x 65°	80° x 55°	65° x 65°	—
Components				
LF	12" woofer	DL15BFH	DL12BFH	15"
HF	DH 2010A	DH 2010A	DH2T	
Inputs	Microphone Input (XLR) Line Level Input (XLR/1/4") XLR out (slave)	Microphone Input (XLR) Line Level Input (XLR/1/4") XLR out (slave)	XLR and 1/4" phone Combination XLR	2 x XLR/jack combo input 2 x XLR slave through 2 x XLR Mid/Hi out
Level Controls	Mic Level (-35 dBu to 0 dBu Master Level (- infinity to 0 dB)	Mic Level (-35dBu to 0dBu Master Level (- infinity to 0dB)	Line level (-infinity to +6dB)	-infinity to +10 dB
2-Band EQ	LF: +/- 6dB HF: +/- 4dB	LF: +/- 6dB HF: +/- 4dB		—
Power Requirement	220 to 240V / 2 amps	220 to 240V / 2 amps	220-240V / 100-120V	230 V (100V, 120V & 240V available)
Dimensions	586 x 429 x 312 mm	625 x 437 x 333 mm	586 x 429 x 312 mm	603 x 428 x 665 mm
(heights x width x depth)	23.07" x 16.89" x 12.28"	24.60" x 17.20" x 13.11"	23.07" x 16.89" x 12.28"	23.74" x 16.85" x 26.18"
Weight (net)	19,5 kg (43 lbs.)	22,2 kg (48.94 lbs.)	16,6 kg (36.6 lbs.)	43 kg (94.8 lbs.)

T-Series

T-Series is optimized for the best performance and price for the mobile audio market. It uses the finest EV components: DL woofers, HP horns and DH2T 2″ coil compression driver. All HF drivers are protected by the famous PRO™ circuit. T221M is made of 13-ply; T251+/T252+ are made of 7-ply. All cabinets are black carpet covered except T221M which is black texture painted. T251+/T252+ are trapezoidal 10° per side. T251+ features a stand mount. T-Series is protected by a black full-face perforated heavy-duty metal grille.

T18

- 18″ LF system
- DL18MT 18″ woofer adds more bass impact to other T-Series™ systems
- Unique SubScoop™ enclosure combines the low-frequency extension of a vented box with the punch and throw of horn loading
- Includes mounting socket and 30″ steel pole for full-range satellite systems

T221

Ω/Ω bi-amping

90° Horn rotatable

RMD™

- Two-way, 12″, medium-throw, full-range system
- High-performance 12″ woofer
- Integral stand-mount adapter accommodates the optional 100BK stand
- Biampable

T251+

Ω/Ω bi-amping

RMD™

- Two-way, 15″ medium-throw, full-range system
- DL15RMD 15″ woofer for great bass and a high degree of midrange clarity
- Integral stand-mount adapter fits the optional 100BK stand
- RMD™
- Biampable

T252+

Ω/Ω bi-amping

90° Horn rotatable

RMD™

- Two-way, dual-15″, medium-throw, full-range system
- Dual DL15RMD woofers combine for powerful bass output and high sensitivity
- Frequency shading (roll-off) of the lower woofer above 400 Hz keeps midrange output clean and free of interference lobes
- Biampable

MTL-1X

dedicated for active X-over

- Dual-18″ low-frequency system
- Unique SubScoop™ enclosure combines the punch and directionality of a horn with the extended response of a vented box
- EVX-180B ultrahigh-performance 600-watt woofers for maximum output

SPECIFICATIONS	T18	T221	T251	T252+	MTL-1X
Frequency Range (-10 dB)	33 - 250 Hz	70 Hz - 16 kHz	45 Hz - 16 kHz	44 Hz - 16 kHz	38 - 160 Hz
Recommended High-Pass Frequency	33 Hz (12 dB/Oct.)	80 Hz (12 dB/Oct.)	45 Hz (12 dB/Oct.)	44 Hz (12 dB/Oct.)	38 Hz (12 dB/Oct.)
Axial Sensitivity SPL 1 W/1 m (Biamp operation)	99 dB	100 dB (100/112 dB)	98 dB (98/112 dB)	101 dB (101/112 dB)	101 dB
Max. SPL /1 m (calc.); full space	132 dB	133 dB	130 dB	136 dB	137 dB
Continuous Power Handling	400 W	400 W (400 W/60 W)	400 W (400 W/60 W)	800 W (800 W/60 W)	1,200 W
Peak Power Handling (Peak)	1,600 W	1,600 W	1,600 W	3,200 W	4,800 W
Coverage (nominal -6 dB) H° x V°	Omnidirectional	60° x 40° (CD Horn)	60° x 40° (CD Horn)	60° x 40° (CD Horn)	Omnidirectional
Directivity Index		9.5 dB (+2.0/-1.5 dB) 800 Hz - 16 kHz	12.6 dB (+9.4/-9.3 dB) 500 Hz - 16 kHz	12.6 dB (+9.4/-9.3 dB) 500 Hz - 16 kHz	
LF woofer (transducer)	18" (DL18MT)	12" (DL12ST)	15" (DL15ST)	2 x 15" (DL15ST)	2 x 18" (EVX-180B)
HF throat diameter (transducer)	—	1" (DH2T)	1" (DH2T)	1" (DH2T)	—
Crossover Frequencies (slope in Biamp mode)	250 Hz or below —	2,600 Hz (12 dB/Oct. LP, 18 dB/Oct. HP)	1,200 Hz (24 dB/Oct.)	1,200 Hz (24 dB/Oct.)	160 Hz or below —
Nominal Impedance (Biamp mode)	8 Ω	8 Ω (8 Ω/8 Ω)	8 Ω (8 Ω/8 Ω)	4 Ω (4 Ω/8 Ω)	4 Ω
Minimum Impedance (Biamp mode)	6.6 Ω	7 Ω (7 Ω/6.3 Ω)	6 Ω(6 Ω/6.3 Ω)	3.2 Ω (3.2 Ω/6 Ω)	3 Ω
Input Connections	1/4"	2 four-pin Speakon®	2 four-pin Speakon®	2 four-pin Speakon®	2 four-pin Speakon®
Dimensions (H x W at front x D) (in floor position)	833 x 630 x 609 mm 32.8" x 24.8" x 24.5"	714 x 417 x 480 mm 28.1" x 16.4" x 18.9"	818 x 488 x 599 mm 32.2" x 19.2" x 23.6"	1,245 x 488 x 599 mm 49.0" x 19.2" x 23.6"	1,160 x 572 x 758 mm 45.8" x 22.5" x 29.9"
Net Weight	49.4 kg (109 lbs.)	22.3 kg (55 lbs.)	35.5 kg (78.1 lbs.)	52.0 kg (114 lbs.)	75 kg (165 lbs.)

G115

G118

Gladiator

The Electro-Voice Gladiator G115 Top and G118 Sub are a powerful combination for modern dance music reproduction. Built-in passive crossovers allow one amplifier channel to drive both the sub and the full-range speaker, forming a true 3-way system.

SPECIFICATIONS	G115	G118	Gladiator System
Frequency Range (+/-3 dB)	35 Hz - 20 Hz	32 Hz - 20 kHz	32 Hz - 20 kHz
Power Handling Continuous (EIA)	400 W	400 W	800 W
Power Handling short term	1,600 W	1,600 W	3,200 W
Sensitivity (1W/1m)	99 dB	99 dB	100 dB
Max. SPL / 1m (calc.)	131 dB	131 dB	134 dB
Coverage (nominal -6 dB) H° x V°	60° x 40°	essentially omni	60° x 40°
LF woofer (transducer)	EVS-15FR	EVS-18S	EVS-15FR + EVS-18S
HF throat diameter (transducer)	1" DH2010A	---	DH2010A
Nominal Impedance	8 Ω	8 Ω	4 Ω
Dimensions (H x W x D)	760 x 438 x 559 mm 29.92" x 17.24" x 22"	760 x 508 x 591 mm 29.92" x 20" x 23.27"	2.160 x 508 x 591 mm 85.04" x 20" x 23.27"
Net Weight	34.1 kg (75.2 lbs.)	36.3 kg (80 lbs.)	70.4 kg (155.2 lbs.)

Eliminator i®

Eliminator i® is black carpet covered, made of EV's Road-Wood. The Eliminator i® family, except Eliminator ii®, have a 35 mm stand mount. Eliminator i®-SE comes with a 45 cm steel pole and contains a combined electrical/acoustical low-pass filter designed for parallel combinations especially with the Eliminator i®-E. The HF section is protected by a PRO™ circuit.

Eliminator KW

Eliminator ii

Eliminator i

Eliminator i Sub

SPECIFICATIONS	Eliminator i E	Eliminator i Sub E	Eliminator ii E	Eliminator kW
Frequency Range (-10 dB)	45 Hz - 20 kHz	38 - 100 Hz	45 - 20 kHz	35 - 160 Hz
Recommended High-Pass Frequency	40-50 Hz (18 dB/Oct.)	40-50 Hz (18 dB/Oct.)	40 Hz (18 dB/Oct.)	—
Axial Sensitivity SPL 1 W/1 m	99 dB	100 dB	100 dB	101 dB
Max. SPL /1 m (calc.); full space	99 dB	134 dB	100 dB	137 dB
Continuous Power Handling	350 W	400 W	600 W	1,000 W
Peak Power Handling (Peak)	1,400 W	800 - 1,000 W	2,400 W	4,000 W
Coverage (nominal -6 dB) H° x V°	60° x 40° (CD horn)	Essentially omni	60° x 40° (CD Horn)	Essentially omni
LF woofer (transducer)	15" (DL15BFH)	18" (DL18BFH)	2 x 15" (DL15BFH)	2 x 18" (DL18MT)
HF throat diameter (transducer)	1" (DH2010A)	1" (DH2010A)	—	—
Crossover Frequencies	1,600 Hz	—	700/1,600 Hz	160 Hz
Nominal Impedance	8 Ω	8 Ω	4 Ω	4 Ω
Minimum Impedance	5.3 Ω	5.1 Ω	3.3 Ω	—
Input Connections	Parallel 1/4" phone jacks	1/4" phone input	Parallel Neutrik® NL4	Parallel Neutrik® NL4
Dimensions (H x W x D)	768 x 429 x 609 mm 30.25" x 16.9" x 24"	859 x 438 x 610 mm 33.8" x 17.25" x 24.13"	1,162 x 429 x 609 mm 45.8" x 16.9" x 24.0"	1160 x 572 x 602 mm 45.7" x 22.5" x 23.7"
Net Weight	34.4 kg (76 lbs.)	43.1 kg (95 lbs.)	48.1 kg (106 lbs.)	65.8 kg (145 lbs.)

Force i®

Force i combines with EV's Q44 power amplifiers to make a professional live-performance system with components designed to play together.

Force i

Force i Sub

force i Monitor

SPECIFICATIONS	Force i Two-Way	Force i Sub	Force i Monitor
Frequency Response (-3 dB)	50 Hz–20 kHz	36–210 Hz	85 Hz–17 kHz
Power Handling			
Continuous	250 watts	350 watts	200 watts
Peak	1,000 watts	1,400 watts	800 watts
Max. Output Capability	130 dB	131 dB	128 dB
Dispersion	80° x 55°	Omnidirectional	55° x 80°
Sensitivity	100 dB	100 dB	99 dB
Impedance	8 Ω	8 Ω	8 Ω
Dimensions (Millimeters)	648 x 465 x 386	648 x 518 x 597	546 x 361 x 246
(Inches)	25.5 x 18.25 x 15.2	25.5 x 20.4 x 23.75	21.5 x 14.2 x 9.7
Net Weight	20.9 kg (46 lbs.)	31.3 kg (69 lbs.)	12.7 kg (28 lbs.)

Xi-Series™

Xi-Series™ brings premium touring-quality sound into installation. Inspired by the features of EV´s acclaimed X-Array™ touring systems, the Xi-Series™ incorporates a potent combination of very-high-output and ultra-linear short-, medium- and long-throw systems, in two-way, three-way and four-way configurations. Xi-Series™ incorporates the acoustical advantage of EV´s unique Ring-Mode Decoupling (RMD™) and features HP horns to secure excellent directivity control and even coverage.

A unique feature of the three-way systems is Vertical Beam Shaping (VBS). The three-way systems may be in 2-element or 3-element configuration to extend the vertical coverage-angle control to as low as 125 Hz, well below that permitted by the mid-bass horn alone (which typically has a band frequency of 800 Hz): Unprecedented performance in a one-box system!

To achieve sound performance without compromises, Xi-Series™ is designed for multi-way active operation, except Xi-1082 which contains a passive crossover network.

Xi-1082

- 2-Way Full-range
- Vented LF enclosure
- 1.3″ voice coil (titanium diaphragm)
- Typical under-balcony slant also perfect for front-stage and near-field use
- 2 x 3/8″-16 mounting bracket inserts

mounting hardware · RMD™ · wh white

Xi-1122A/85F

- 2-Way Full-range
- Vented LF enclosure
- 3″ voice coil (titanium diaphragm)
- Integrated 35 mm stand mount
- Trapezoidal (15° per side)

flying hardware · dedicated for active X-over · RMD™ · wh white · un unfinished

Xi-1152A/64F (60° x 40°)

Xi-1152A/94F (90° x 40°)

- 2-Way Full-range
- Solid bass down to 50 Hz (-3 dB)
- Vented LF enclosure
- 3″ voice coil (titanium diaphragm)
- Integrated 35 mm stand mount
- Trapezoidal (15° per side)

flying hardware · dedicated for active X-over · 90° Horn rotatable · RMD™ · wh white · un unfinished

Xi 2123A

Xi-1123A/106F Xi-2123A/106F

- 3-Way High-Output Full-range
- Vented slot load designed LF enclosure
- Horn-loaded MB/HF section fully rotatable
- 3″ voice coil (titanium diaphragm)
- Bypassable MB/HF passive crossover
- Dipole mode brings vertical directivity control down to 250 Hz
- Excellent directivity 500 Hz – 16 kHz
- Trapezoidal (9° per side)

flying hardware · 90° Horn rotatable · Ω/Ω bi-amping · RMD · dedicated for active X-over · un unfinished · VBS

Xi 1183A
Xi 1153A
Xi2122MHA

Xi-1183A/64F Xi-1153A/64F

- 3-Way High-Output Full-range
- Vented slot load designed LF enclosure
- Coaxial horn-loaded MB/HF section fully rotatable
- 3″ voice coil (titanium diaphragm) HF
- VBS for vertical directivity control down to 200 Hz
- Excellent directivity control
- Trapezoidal (9° per side)

flying hardware · 90° Horn rotatable · dedicated for active X-over · RMD · VBS · un unfinished · wh white

Xi-2122MHA/42F

- 2-Way output Far-field
- MB/HF section horn-loaded
- Excellent directivity control
- Trapezoidal (9° per side)

flying hardware · 90° Horn rotatable · dedicated for active X-over · RMD · wh white · un unfinished

Xi 1122MHA

Xi-1122MHA/64F

- 60° x 40° for near and mid field
- MB/HF section horn-loaded
- Excellent directivity control
- Trapezoidal (9° per side)

flying hardware · 90° Horn rotatable · dedicated for active X-over · RMD · wh white · un unfinished

Xi 2153A

Xi-2153A/64F

- 3-Way High-Output Full-range
- Vented slot load designed LF enclosure
- Coaxial horn-loaded MB/HF section fully rotatable
- 3″ voice coil (titanium diaphragm)
- VBS mode brings vertical directivity control down to 150 Hz
- Excellent directivity control
- Trapezoidal (9° per side)

flying hardware · 90° Horn rotatable · dedicated for active X-over · RMD · wh white · VBS · un unfinished

Xi-Series™

Xi-1191A (F) (F = flying version)

Xi-2181A (F) (F = flying version)

- 1 x 18" Subwoofer 1191 (F)
- 2 x 18" Subwoofer 2181 (F)
- Vented design
- Superior linear excursion capability
- Accurate transient detail
- trapezoidal (9° per side)

flying hardware

dedicated for active X-over

RMD

un unfinished

wh white

Specification overview

SPECIFICATIONS	Xi-1082	Xi-1122A/85F	Xi-1152A/64F	Xi-1152A/94F
Frequency Range (-3 dB)	50 Hz - 20 kHz	60 Hz - 16 kHz	50 Hz - 16 kHz	50 Hz - 16 kHz
Recommended High-Pass Frequency	60-80 Hz (12 dB/Oct.)	DX 38 preset	DX 38 preset	DX 38 preset
Axial Sensitivity SPL 1W/1m	90 dB	99/110 dB	98/113 dB	98/112 dB
Max. SPL / 1m (calc.); full space	118 dB	130/135 dB	132/138 dB	132/137 dB
Long-Term Power Handling	175 W	300/75 W	600/75 W	600/75 W
Short-Term Power Handling (Peak)	700 W	1.200/300 W	2.400/300 W	2.400/300 W
Coverage (nominal -6 dB) H° x V°	90° x 40° (CD Horn)	80° x 55° (CD Horn)	60° x 40° (CD Horn)	90° x 40° (CD Horn)
Directivity Index	11.2 dB (+1.8/-2.7 dB) 2.000 - 20.000 Hz	10.9 dB (+1.2/-2.9 dB) 1.200 - 16.000 Hz	13.4 dB (+1.3/-2.3 dB) 1.200 - 16.000 Hz	12.3 dB (+0.7/-1.5 dB) 1.200 - 16.000 Hz
LF woofer (transducer)	8" (---)	12" (DL-type)	15" (EVX-155)	15" (EVX-155)
MB woofer (transducer)	---	---	---	---
HF throat diameter (transducer)	1" (DH3)	1.4" (ND6-16)	1.4" (ND6-16/2)	1.4" (ND6-16/2)
Crossover Frequencies	3,500 Hz (passive)	DX 38 preset	DX 38 preset	DX 38 preset
Nominal Impedance	8 Ω	8 Ω/16 Ω	8 Ω/16 Ω	8 Ω/16 Ω
Minimum Impedance	5.8 Ω	8.5 Ω/13.4 Ω	6.3 Ω/14.0 Ω	6.3 Ω/12.2 Ω
Input Connections	barrier strip	2 four-pin Speakon	2 four-pin Speakon	2 four-pin Speakon
Dimensions (H x W at front x D)	235 x 488 x 285 mm 9.25" x 9.21" x 11.22"	584 x 375 x 356 mm 22.99" x 14.76" x 14.01"	759 x 450 x 413 mm 29.88" x 17.72" x 16.26"	759 x 450 x 413 mm 29.88" x 17.72" x 16.26"
Net Weight	13.3 kg (29.3 lbs.)	31.3 kg (69 lbs.)	40.8 kg (89.9 lbs.)	40.8 kg (89.9 lbs.)

SPECIFICATIONS	Xi-1123A/106F	Xi-2123A/106F	Xi-1183A/64F	XI-1153A/64F	Xi-1122MH64
Frequency Range (-3 dB)	80 Hz - 16 kHz	80 Hz - 16 kHz	48 Hz - 16 kHz	48 Hz - 16 kHz	125 Hz - 20 kHz
Recommended High-Pass Frequency	DX 38 preset	DX 38 preset	DX 38 preset	DX 38 preset	Systemcontroller
Axial Sensitivity SPL 1W/1m	98/109/112 dB	101/109/112 dB	94/107/112 dB	91.5/107/112 dB	110/112 dB
Max. SPL / 1m (calc.); full space	129/140/137 dB	135/140/137 dB	128/138/137 dB	125/138/137 dB	141/137 dB
Long-Term Power Handling	300/300/75 W	600/300/75 W	600/300/75 W	600/300/75 W	300/75 W
Short-Term Power Handling (Peak)	1.200/1.200/300 W	2.400/1.200/300 W	2.400/1.200/300 W	2.400/1.200/300 W	1.200/300 W
Coverage (nominal -6 dB) H° x V°	100° x 60° (CD Horn)	100° x 60° (CD Horn)	60° x 40° (CD Horn)	60° x 40° (CD Horn)	60° x 40° (CD Horn)
Directivity Index	10.3 dB (+1.4/-1.2 dB) 500 - 16.000 Hz	10.1 dB (+1.6/-3.5 dB) 160 - 16.000 Hz	13.3 dB (+1.4/-1.1dB) 800 - 16.000 Hz	13.3 dB (+1.4/-1.1dB) 800 - 16.000 Hz	13.4 dB (+2.0/-1.8 dB) 800 - 16.000 Hz
LF woofer (transducer)	12" (DL-type)	2 x 12" (DL-type)	18" (EVX-180B)	15" (EVX-155)	---
MB woofer (transducer)	10" (DL-type)	10" (DL-type)	12" (ND-12)	12" (ND-12)	12" (ND-12)
HF throat diameter (transducer)	1.4 (ND6-16)	1.4 (ND6-16)	1.4" (ND6-16)	1.4" (ND6-16)	1.4" (ND6-16)
Crossover Frequencies	DX 38 preset	DX 38 preset	DX 38 preset	DX 38 preset	System controller
Nominal Impedance	12 Ω/16 Ω/16Ω	6 Ω/16 Ω/16Ω	8 Ω/16 Ω/16Ω	8 Ω/16 Ω/16	16 Ω/16
Minimum Impedance	8.7 Ω/9.6 Ω/12.4 Ω	4.7 Ω/10.3 Ω/12.6 Ω	7.7 Ω/8.7 Ω/13.1 Ω	7.5 Ω/8.7 Ω/13.1	9.9 Ω/12.9
Input Connections	2 eight-pin Speakon	2 eight-pin Speakon	2 eight-pin Speakon.	2 eight-pin Speakon.	2 eight-pin Speakon
Dimensions (H x W at front x D)	801 x 456 x 473 mm 31.54" x 17.95 x 18.62"	1007 x 456 x 473 mm 39.65" x 17.95" x 18.62"	914 x 586 x 759 mm 36" x 23.07" x 29.88"	914 x 586 x 759 mm 36" x 23.07" x 29.88"	596 x 584 x 759 mm 23.47" x 22.99" x 29.88"
Net Weight	56.8 kg (125.2 lbs.)	68.0 kg (149.9 lbs.)	93.0 kg (205 lbs.)	93.0 kg (205 lbs.)	

SPECIFICATIONS	Xi-2153A/64 F	Xi-1191A	Xi-2181A (F)	Xi-2122MHA/42F
Frequency Range (-3 dB)	45 Hz - 16 kHz	37 Hz - 160 Hz	37 Hz - 200 Hz	140 Hz - 20 kHz
Recommended High-Pass Frequency	DX 38 preset	DX 38 preset	DX 38 preset	Systemcontroller
Axial Sensitivity SPL 1W/1m	96/107/112 dB	94 dB	99 dB	112/116 dB
Max. SPL / 1m (calc.); full space	133/138/137 dB	128 dB	136 dB	146/144 dB
Long-Term Power Handling	1.200/300/75 W	600 W	1.200 W	600/150 W
Short-Term Power Handling (Peak)	4.800/1.200/300 W	2.400 W	4.800 W	2.400/600 W
Coverage (nominal -6 dB) H° x V°	60° x 40° (CD Horn)	essentially omni	essentially omni	40° x 20°(CD Horn)
Directivity Index	13.4 dB (+1.4/-1.2 dB) 800 - 16.000 Hz	2.7 dB (+1.0/-0.6dB) 63 - 100 Hz	3.4 dB (+1.4/-0.9dB) 63 - 200 Hz	17.2 dB (+2.0/-2.7 dB) 800 - 16.000 Hz
LF woofer (transducer)	2 x 15" (EVX-155)	18" (EVX-180B)	2 x 18" (EVX-180B)	---
MB woofer (transducer)	12" (DL-type)	---	---	2 x 12" (ND12)
HF throat diameter (transducer)	1.4" (ND6-16)	---	---	2 X 1.4" (ND6-16)
Crossover Frequencies	DX 38 preset	DX 38 preset	DX 38 preset	System controller
Nominal Impedance	4 Ω/16 Ω/16Ω	8 Ω	2 x 8 Ω	8 /8
Minimum Impedance	3.8 Ω/8.9 Ω/13.1 Ω	6.7 Ω	2 x 6.0 Ω	4.9 /7.0
Input Connections	2 eight-pin Speakon	2 eight-pin Speakon	2 eight-pin Speakon	2 eight-pin Speakon
Dimensions (H x W at front x D)	1.233 x 586 x 759 mm 48.54" x 23.07" x 29.88"	914 x 586 x 759 mm 35.98" x 23.07" x 29.88"	914 x 586 x 759 mm 35.98" x 23.07" x 29.88"	1.067 x 584 x 759 mm 2" x 22.99" x 29.88"
Net Weight	113.4 kg (250 lbs.)	68.0 kg (149.9 lbs.)	83.5 kg (184 lbs)	86.1 kg (190 lbs.)

X-Array™

X-Array™ speaker systems provide world-class performance and flexibility for the ultimate in concert touring systems. It incorporates unique "one-man" rigging and neodymium magnets for very large arrays.

The X-Array™ X-Series™ represents important advancements in concert-sound reinforcement technology. Design goals called for the highest acoustic output capability with the highest fidelity in relatively lightweight, compact enclosures that were easy to array. The individual systems, drivers, horns, enclosures, rigging hardware and system configurations were designed from the ground up specifically for this high-performance application. For easier handling, special speaker dollies are available.

RMD™ X-Array™'s design process also resulted in the development of EV's most ingenious acoustic technologies, RMD™. RMD™ gives X-Array™ unprecedented acoustic output and excellent directivity control.EV´s traditional top-down development strategy ensured the incorporation of this essential acoustic advantage into other EV products.

Rigging for Large Arrays: unique rear-hinge system for fast, easy and secure rigging. A 64-box hang goes up or down in 30 minutes. Front rigging straps control vertical aiming, rear fixed hinge makes tilting easy. Mating positioning recesses on cabinet tops and bottoms help to assemble and disassemble an array on the ground, a layer at a time. A detailed flying manual and structural ratings handbook is available. The X-Array™ one-person rigging hardware has earned German TÜV approval.

Neodymium magnetics: for lighter weight and maximum acoustic output. All 12-inch mid-bass transducers are the ND12A, for a 3-dB average increase in output. Neodymium in the ND6-16 compression driver increases output in the upper octaves. The ND6-16 driver features a 3" titanium diaphragm.

Amping and Controller: X-Array™ is powered by EV´s world-famous Precision Series™ amplifiers and controlled by Klark Teknik DN9848 digital 4-in/8-out controller, DSP controlled Precision Series amplifiers, or the Electro-Voice Dx38 for flexible and easy configurations.

X-Array™ is constructed from 13-ply birch plywood finished in black textured paint and protected by a powder-coated steel front grille backed with foam.

flying hardware

dedicated for active X-over

RMD

Xf, Xn and Xb look identical

Xf

- 2-way output far-field
- MB/HF section horn-loaded
- Height same as Xn, Xb
- Excellent directivity control
- Trapezoidal (9° per side)

Xn

- 3-way output near-field
- MB/HF section horn-loaded and rotatable
- Height same as Xf, Xb
- Excellent directivity control
- Trapezoidal (9° per side)

Xb

- High-output LF cabinet
- Manifolded, vented design
- Height same as Xn, Xf
- Accurate transient detail
- Trapezoidal (9° per side)

flying hardware

dedicated for active X-over

RMD

Xcn and Xcb look identical

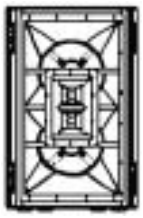
Xcn

- 2-way output near-field
- Height same as Xcb
- MB/HF section identical to Xn and rotatable
- Excellent directivity control
- Trapezoidal (9° per side)

Xcb

- High-output LF cabinet
- Vented design
- Height same as Xcn
- Equivalent to half of an Xb
- Accurate transient detail
- Trapezoidal (9° per side)

Sketch of a Xf



Xds

- Extraordinary output low-end sub
- Manifolded, vented design
- Accurate transient detail
- Trapezoidal (18° per side)
- Designed for ground stacking

dedicated for active X-over

RMD

Xw 12 / Xw 15

- 2-way high-output Floor monitor
- Vented LF enclosure
- 3" voice coil (titanium diaphragm) for low distortion
- Two symmetrical 55° angles

dedicated for active X-over

RMD

SPECIFICATIONS

	Xf	Xn	Xcn	Xb
Frequency Range (-3 dB)	140 Hz - 20 KHz	48 Hz - 20 KHz	125 Hz - 20 KHz	37 Hz - 200 Hz
Recommended High-Pass Frequency	Systemcontroller	Systemcontroller	Systemcontroller	Systemcontroller
Axial Sensitivity SPL 1W/1m	112/116 dB	95/110/112 dB	110/112 dB	98.5 dB
Max. SPL / 1m (calc.); full space	146/144 dB	129/141/137 dB	141/137 dB	135 dB
Long-Term Power Handling	600/150 W	600/300/75 W	300/75 W	1.200 W
Short-Term Power Handling (Peak)	2.400/600 W	2.400/1.200/300 W	1.200/300 W	4.800 W
Coverage (nominal -6 dB) H° x V°	40° x 20° (CD Horn)	60° x 40° (CD Horn)	60° x 40° (CD Horn)	240° x 300° (63-200 Hz)
Directivity Index	17.2 dB (+2.0/-2.7 dB) 800 Hz - 16 KHz	13.7 dB (+1.4/-1.4 dB) 800 Hz - 16 KHz	13.4 dB (+2.0/-1.8 dB) 800 Hz - 16 KHz	3.4 dB (+1.4/-0.9 dB) 63 - 200 Hz
LF woofer (transducer)		18" (EVX-180B)		2 x 18" (EVX-180B)
MB woofer (transducer)	2 x 12" (ND12A)	12" (ND12A)	12" (ND12A)	---
HF throat diameter (transducer)	2 x 1.4" (ND6-16)	1.4" (ND6-16)	1.4" (ND6-16)	---
Crossover Frequencies	Systemcontroller	Systemcontroller	Systemcontroller	Systemcontroller
Nominal Impedance	8 Ω/8 Ω	8 Ω/16 Ω/16 Ω	16 Ω/16 Ω	2 x 8 Ω
Minimum Impedance	4.9 Ω/7.0 Ω	6.5 Ω/9.4 Ω/14.0 Ω	9.9 Ω/12.9 Ω	2 x 6.4 Ω
Input Connections	2 eight-pin Speakon	2 eight-pin Speakon	2 eight-pin Speakon	2 eight-pin Speakon
Dimensions (H x W at front x D)	1.067 x 584 x 759 mm 42" x 22.99" x 29.88"	1.067 x 584 x 759 mm 42" x 22.99" x 29.88"	596 x 584 x 759 mm 23.47" x 22.99" x 29.88"	1.067 x 584 x 759 mm 42" x 22.99" x 29.88"
Net Weight	87.1 kg (192 lbs.)	87.1 kg (192 lbs.)	60.8 kg (134 lbs.)	83.5 kg (184 lbs.)

SPECIFICATIONS

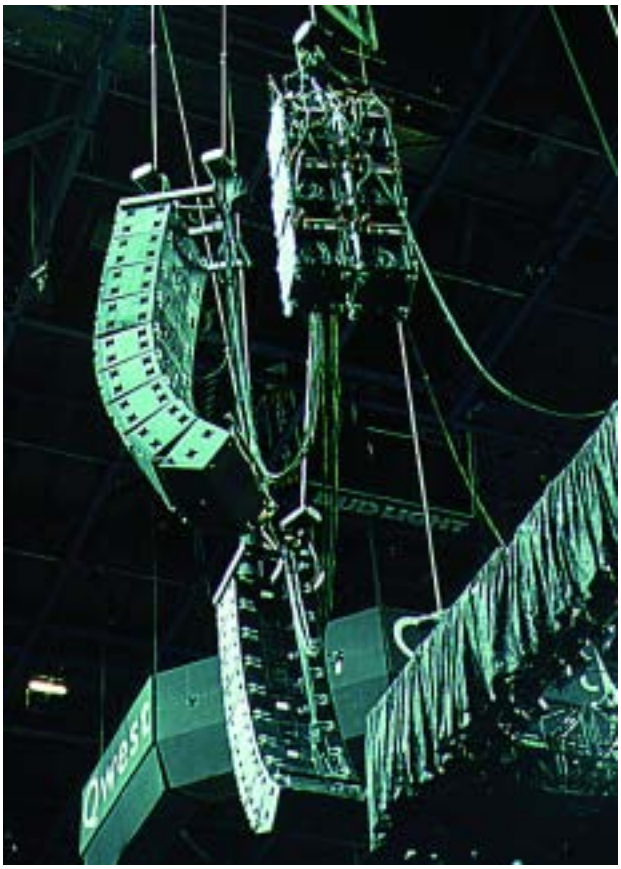
	Xcb	Xds	Xw12	Xw15
Frequency Range (-3 dB)	37 Hz - 200 Hz	32 Hz - 200 Hz	60 Hz - 16 KHz	50 Hz - 16 KHz
Recommended High-Pass Frequency	Systemcontroller	Systemcontroller	Systemcontroller	Systemcontroller
Axial Sensitivity SPL 1W/1m	95 dB	100 dB	99/110 dB	99/110 dB
Max. SPL / 1m (calc.); full space	129 dB	137 dB	130/135 dB	133/135 dB
Long-Term Power Handling	600 W	1.200 W	300/75 W	600/75 W
Short-Term Power Handling (Peak)	2.400 W	4.800 W	1.200/300 W	2.400/300 W
Coverage (nominal -6 dB) H° x V°	300° x 270° (63-200 Hz)	180° x 200° (63-200 Hz)	55° x 80° (CD Horn)	55° x 80° (CD Horn)
Directivity Index	2.7 dB (+1.0/-0.6 dB) 63 - 200 Hz	4.8 dB (+2.1/-1.7 dB) 63 - 200 Hz	11.6 dB (+2.3/-2.1dB) 1,200 Hz - 16 KHz	11.6 dB (+3.0/-3.6dB) 1,200 Hz - 16 KHz
LF woofer (transducer)	18" (EVX-180B)	2 x 18" (EVX-180B)	12" (DL-type)	15" (EVX-155)
MB woofer (transducer)	---	---	---	---
HF throat diameter (transducer)	---	---	1.4" (DH7)	1.4" (DH7)
Crossover Frequencies	System controller	System controller	System controller	System controller
Nominal Impedance	8 Ω	2 x 8 Ω	8 Ω/16 Ω	8 Ω/16 Ω
Minimum Impedance	5.6 Ω	2 x 6.1 Ω	8.2 Ω/10.5 Ω	7.2 Ω/14.3 Ω
Input Connections	2 eight-pin Speakon	2 eight-pin Speakon	2 four-pin Speakon	2 four-pin Speakon
Dimensions (H x W at front x D)	596 x 584 x 759 mm 23.47" x 22.99" x 29.88"	914 x 1.166 x 759 mm 35.98" x 45.91" x 29.88"	358 x 584 x 409 mm 14.09" x 22.99" x 16.10" (in floor position)	389 x 644 x 461 mm 15.32" x 25.35" x 18.15" (in floor position)
Net Weight	55.8 kg (123 lbs.)	121.0 kg (266.8 lbs.)	28.2 kg (62.2 lbs.)	31.8 kg (70.1 lbs.)

X-Line™

Development of the new EV® X-Line™ system was driven by the need for a high-level concert touring enclosure that combines the sonic impact and vocal intelligibility of the renowned X-Array™ system with the uniform, predictable coverage that only a line-array configuration can deliver. The EV engineering team set out to develop the next generation of line-array systems, combining their years of experience in the development of X-Array™ with the absolute latest state-of-the-art technologies. As a matter of course, X-Line™ features the essential acoustical advantage of RMD™.

The X-Line™ system was designed to provide wide horizontal dispersion (90 degrees) from a single vertical line array while providing exceptionally coherent wavefront summing in the vertical plane. At the heart of X-Line™ is a proprietary high-frequency wavefront alignment and summation device – the Hydra™ – that provides planar and time-coherent signal addition. The broad bandwidth vertical planar summing provides uniform sound field distribution throughout the listening area.

Stereo imaging is improved by the X-Line™´s full-bandwidth mid-bass loading. Extended low-frequency polar control produces more uniform power response, further enhancing overall system intelligibility. The overall power response of the X-Line™ is very uniform across a wide frequency spectrum, thus enabling the system´s very musical sonic character.



If every performance space conformed to the same acoustic ideal, any linear loudspeaker array would suffice. But every arena, concert hall, and stadium is a unique space, and the one-box, one-dimensional design of most linear arrays just can´t adapt. X-Line™ is different. X-Line™ combines the power and vocal clarity of the X-Array™ with a versatile, fully configurable linear array design, plus the efficiency of one-person rigging.

X-Line™ lets you stack Xvls enclosures at the top of an array for long throw with a 90° horizontal included angle, followed by Xvlt enclosures for the shorter throw and 120° horizontal coverage needed at the J-curve of the array. Beneath the array, Xfil enclosures provide downfill coverage that maintains the vertical integrity of the array. Completing the X-Line™ system are Xsub subwoofers that can be flown next to the main array or ground stacked.

X-Line™ is made of 13-ply birch plywood with structural aluminum reinforcement and is finished with a rugged foam-backed steel grille to protect the drivers. A user guide with detailed specifications is available on request. Electro-Voice recommends using the Klark Teknik DN9848 or EV's Dx38 as the system controller, along with EV® P3000 power amplifiers.

Xvls

- High-output, three-way line-array system
- Rectangular cabinet designed for upper section of linear array
- 90° horizontal coverage pattern ideal for long-throw applications
- New EV® Hydra™ time-synchronized HF vertical plane-wave generator provides excellent far-field summing
- Ring Mode Decoupling® (RMD®) provides level-independent fidelity, greater midbass clarity, and high frequency accuracy
- Proprietary rigging allows for rapid venue load-in and load-out

Xvlt

- High-output, three-way line-array system
- Five-degree trapezoidal cabinet design for lower "J" section of linear array
- 120° horizontal coverage typical for medium-throw assignment
- New EV Hydra™ time-synchronized HF vertical plane wave generator provides excellent far-field summing
- Ring Mode Decoupling® (RMD®) provides level-independent fidelity, greater midbass clarity, and high frequency accuracy
- Proprietary rigging allows for rapid venue load-in and load-out

Xfil1/Xfil2

- High-output, two-way line-array system
- Downfill system designed to complement a line array of Xvls and Xvlt systems for near-field assignment with 120° horizontal coverage
- Wide 40° vertical coverage with voicing similar to other X-Line™ models for smooth transition from near-field to mid-field
- Ring Mode Decoupling® (RMD®) provides level-independent fidelity, greater midbass clarity, and high-frequency accuracy
- Proprietary rigging allows for rapid venue load-in and load-out
- Mirror-imaged Xfil1 and Xfil2 models for left and right sides.

Xsub/f

- High-output, line-array subwoofer system
- Rectangular cabinet with footprint identical to other X-Line systems
- Can be flown or ground-stacked with non-flying version
- Proprietary rigging allows for rapid venue load-in and load-out

SPECIFICATIONS

	Xvls	Xvlt	Xfil1/Xfil2	Xsub/f
Frequency range (-3 dB)	40 Hz–16 kHz	40 Hz–16 kHz	40 Hz–16 kHz	33–400 Hz
Recommended high-pass frequency	50 Hz	50 Hz	50 Hz	33 Hz
Sensitivity (SPL 1 W/1 m) (LF/MB/HF)	101 dB/111 dB/118 dB	101 dB/111 dB/117 dB	101 dB/107 dB/112 dB	100/106 dB*
Max. SPL/1m (calc.) (LF/MB/HF)	132 dB/139 dB/142 dB	132 dB/139 dB/141 dB	132 dB/135 dB/134 dB	131/137 dB*
Long-term power handling (LF/MB/HF)	1,200 W/600 W/225 W	1,200 W/600 W/225 W	1,200 W/600 W/150 W	1,200 W
Short-term power handling (LF/MB/HF)	4,800 W/2,400 W/900 W	4,800 W/2,400 W/900 W	4,800 W/2,400 W/600 W	4,800 W
Coverage (H° x V°)	90° x 5°	120° x 9°	120° x 40°	200° x 325°
LF driver	2 x EVX-155 Plate	2 x EVX-155 Plate	2 x EVX-155 Plate	2 x EVX-180B
MB driver	2 x ND08	2 x ND08	2 x ND08	—
HF driver	3 x ND6	3 x ND6	2 x ND6	—
Crossover frequencies	220 Hz/1,250 Hz	220 Hz/1,250 Hz	220 Hz/1,250 Hz	80 Hz
Nominal impedance	2 x 8 Ω/8 Ω/5.3 Ω	2 x 8 Ω/8 Ω/5.3 Ω	2 x 8 Ω/8 Ω/8 Ω	2 x 8 Ω
Input connections	2 Neutrik® NL8	2 Neutrik® NL8	2 Neutrik® NL8	2 Neutrik® NL8
Dimensions (H [front/rear] x W x D)	494.3/494.3 x 1244.6 x 740.4 mm 19.46"/19.46" x 49" x 29.15"	494.3/429.7 x 1244.6 x 740.4 mm 19.46"/16.92" x 49" x 29.15"	494.3/429.7 x 1244.6 x 740.4 mm 19.46"/16.92" x 49" x 29.15"	494.3/494.3 x 1244.6 x 740.4 mm 19.46"/19.46" x 49" x 29.15"
Net weight	117 kg (257 lbs.)	115 kg (253 lbs.)	115 kg (253 lbs.)	92 kg (202 lbs.)

* 1/2-space

The X^{LC} SYSTEM

While the flagship X-Line meets the acoustical needs of the largest venues and arenas, EV's compact line-array, X^{LC}, was designed to match the demands for easy setup and transportation combined with outstanding sonic results in a large variety of venue sizes.

SYSTEM FEATURES:

- **Wide, constant horizontal coverage pattern of 120°**
- **Four-way system; bi- or tri-ampable fullrange cabinets**
- **Rigging hardware totally integrated into cabinets**
- **Front rigging/rear aiming concept enables precise control of vertical line source pattern**

X^{LC} 127+ / X^{LCi} 127+

Main Cabinet

This cabinet is the main component in a XLC line array. Starting with a minimum of four cabinets, a reasonable array size uses six to eight boxes, up to a maximum of 16 for larger arenas. The three-way axis-asymmetric design includes a single EV DL-12 low-frequency/mid-bass woofer optimized for this cabinet. Two 6.5" horn-loaded drivers in a vertical array cover the mid-frequency bandpass.

The XLC127+ utilizes two ND6 (3" voice-coil) neodymium compression drivers loaded on two Hydra™ plane wave generators. With a horizontal coverage of 120°, the XLC system accurately covers wide areas while maintaining excellent imaging and lobe-free coverage. The XLC127+ is equipped with an internal x-over for mid-bass and high-frequency to allow for either biamp or triamp operation. This cabinet is also available with dedicated rigging for fixed installations as XLCi 127+.

X^{LC} 118 / X^{LCi} 118

Subwoofer

The XLC 118 is a direct radiating design using the legendary EVX180B 18-inch woofer. The XLC 118 includes the same rigging and has 1.5 times the height of the XLC127 main cabinet. This allows a hang of XLC118s to be flown beside the main hang at a 3:2 ratio, maintaining aesthetic requirements for equal hang heights. Flying subwoofers benefits in a more even front-to-back SPL distribution, compared to a "classical" ground stack. Also available as XLCi 118, for fixed installations.

Specifications

Technical Specifications for X^{LC} Cabinets

Specification	X^{lc} 127+ / X^{lci} 127+	X^{lc} 118 / X^{lci} 118
Horizontal Coverage	120°	300°
LF Power Handling	300 W cont./1200 W peak	600 W cont./2400 W peak
MB Power Handling	200 W cont./800 W peak	—
HF Power Handling	150 W cont./600 W peak	—
Sensitivity (LF/MB/HF)	95 dB/101 dB/110 dB	96 dB/102 dB*
Max. SPL (calc.)	126/130/138 dB	130/136 dB*
LF Transducer 2 x 6.5" DM 65	1 x 12" DL 12 ST —	EVX180B MB Transducer
HF Transducer	2 x N D 6-16	—
Connectors	2 Neutrik® NL8	2 Neutrik® NL8
Enclosure Material	Futura®-coated plywood	Futura®-coated plywood
Grille	Powder-coated steel	Powder-coated steel
Environmental Specs	IEC 529 IP24 MIL STD 810	IEC 529 IP24 MIL STD 810
Dimensions (H x W x D)	362 x 991 x 572 mm 14.25" x 39 " x 22.5"	546 x 991 x 572 mm 21.5" x 39" x 22.5"
Net Weight	50,4 kg (111 lbs)	54.5 kg (120 lbs

*Half space environment

X^{lc} 127+ shown

Perfect System Control using RACE-processed presets for DX38 and P-Series RL Remote Amplifiers

SIRIS
Intelligent Remote Integrated Supervision

Recommended System Drive for X^{LC} (in triamp mode)

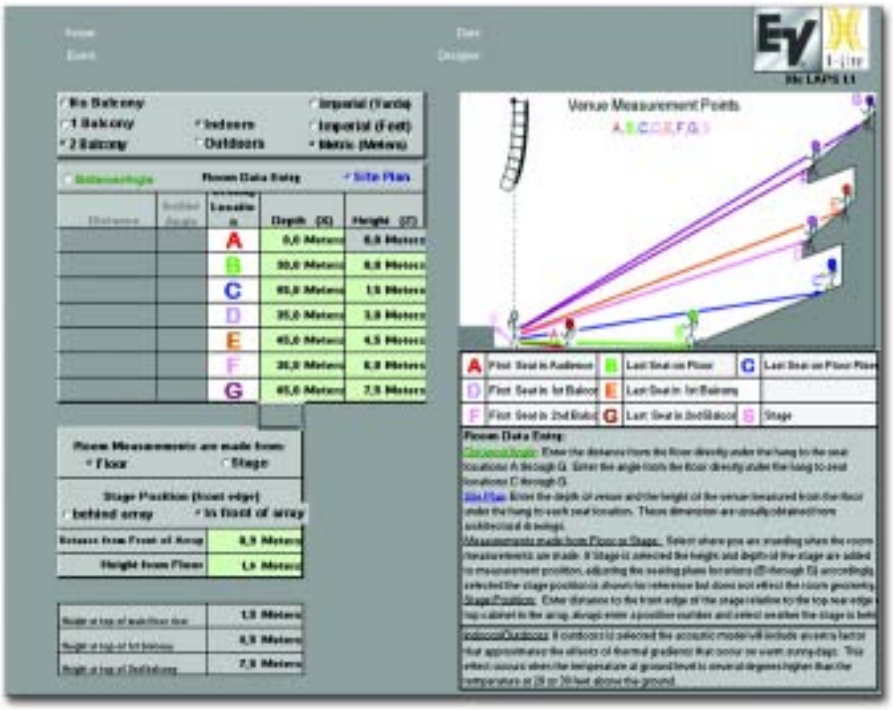
Cabinet:	XLC 127+	XLC 118
HF:	CP 2200 / P 1200 RL*	-
MB:	CP 2200 / P 1200 RL*	-
LF:	CP 2200 / P 1200 RL*	CP 3000 S / P 3000 RL
System Controller:	Dx38 or DSP Controlled Precision Series Amplifiers (RL)	

*P300RL also an option

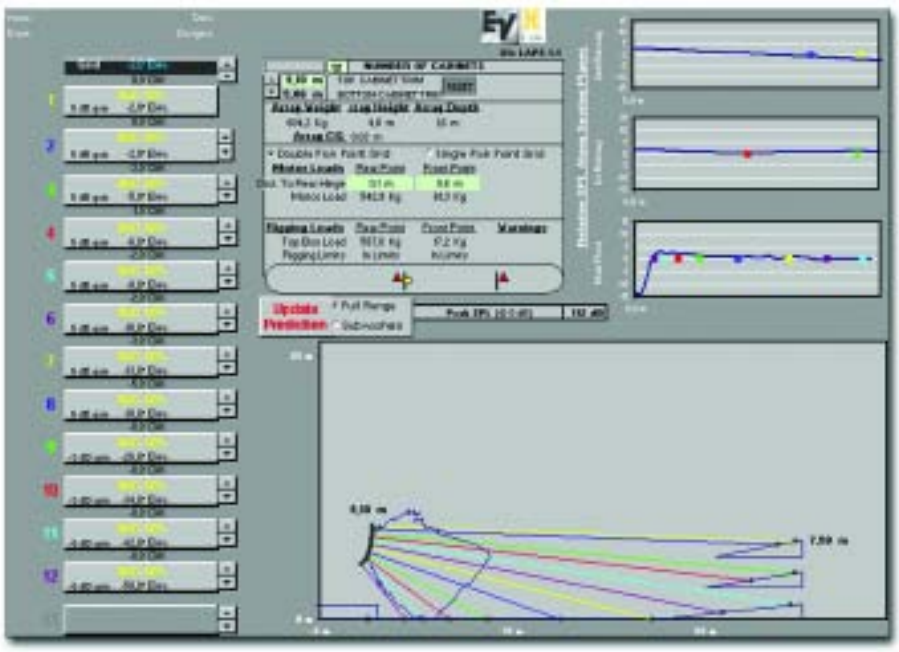
Line Array Prediction Software: LAPS

Line Array Prediction Software (LAPS) for EV XLC and X-Line systems makes system behavior predictable. Entire hang setups, including motor loads, cabinet aiming, and resulting sound pressure distribution, can be calculated before physical hang setup. Available for free at www.electrovoice.com.

(A) Set up your environmental parameters



(B) Trim your hang for optimum SPL distribution



(C) Set up your line array according to calculated parameters and enjoy excellent sound quality.

Floor Monitors

The following two pages give you an overview about of EV´s professional floor monitors. All monitors shown have optimized monitor angles and, as is typical with EV, have very low feedback properties. For technical details or information about recommended high-pass frequencies, refer to the appropriate product pages.

Sx250/SxA250

- 350 W (longterm) / 150W + 50W powered
- 15" / 1" exit
- max. SPL 130 dB/1m
- 45° monitor angle

RMD
flying hardware
wh white

100° x 100°

FRi-28LPM

- Low profile ideal for theater front stage, under balcony or on-wall (vertical) use
- 2x8"/1" voicecoil
- 200 W (long-term)
- Max. SPL 122 dB/1m (calc.)
- 45° monitor angle

RMD
mounting hardware
wh white
un unfinished

75° x 50°

QRx 112/75

- Perfect for high performance monitoring in concert sound applications
- 12"/1.4" exit
- 300 W (long-term)
- Max. SPL 131 dB/1m (calc.)
- 55° (approx.) monitor angle
- Integrated stand mount and optional L-Track rigging allows flexible usage
- Note: in monitor position rotate the horn with so the 35° dispersion is pointing upwards.
- Note: press high-pass (mid/high-mode) at controller amp module M-112 when used on floor

Ω/Ω bi-amping
90° Horn rotatable
RMD
wh white
flying hardware
un unfinished

75° x 50°

QRx 115/75

- Perfect for high -performance monitoring in concert-sound applications
- 15"/1.4" exit
- 400 W (long-term)
- Max. SPL 110 dB/1m (calc.)
- 55° (approx.) monitor angle
- Integrated stand mount and optional L-Track rigging allows flexible usage
- Note: in monitor position rotate the horn with so the 35° dispersion is pointing upwards.
- Note: press high-pass (mid/high-mode) at controller amp module M-115 when used on floor

Ω/Ω bi-amping
90° Horn rotatable
RMD
wh white
flying hardware
un unfinished

65° x 65°

Sx 100 and Sx 300 (shown with F200)

wh white

RMD

- Symmetrical horn **65° x 65°**
- 12″/1″ exit
- Sx 300: 300 W (long-term) Sx 100+: 200W (longterm)
- 50° (approx.) monitor angle
- F200 necessary (monitor feet, black)

POWERED

SxA100+ | SxA360

RMD

- Built-in 2-way amplifier (150W+50W cont.; 380W+80W peak)
- 12″ / 1″exit
- max. SPL 124 dB/1 m
- 50° (approx.) monitor angle
- F200 included (monitor feet, black)

- 350 W LF + 150 W HF Output Power
- Only 16.6 kg (43 lbs)
- 2″ Voice Coil DH2T Compression Driver
- Dynamic Filters provide Overload Protection & Linear Response

55° x 80°

T 221 M

Ω/Ω bi-amping

RMD

- Perfect for high-performance monitoring in budget-limited productions
- 12″/1″ voicecoil DH2T CD
- 400 W (long-term)
- Two 55° angles allows symmetrical monitor set-ups

55° x 80°

Xw 12

dedicated for X active X-over

RMD

- Perfect for highest-performance monitoring in concert-sound applications
- 12″/1.4″ exit
- 300/75 W (long-term)
- Max. SPL 130 dB/1m (calc.)
- Two 55° angles allows symmetrical monitor set-ups
- Dedicated digital controller is Dx38

55° x 80°

Xw 15

dedicated for X active X-over

RMD

- Perfect for highest-performance monitoring in concert-sound applications
- 15″/1.4″ exit
- 600/75 W (long-term)
- Max. SPL 133 dB/1m (calc.)
- Two 55° angles allows symmetrical monitor set-ups
- Dedicated digital controller is Dx38

Subwoofers

	EVID 12.1	EVID C10.1	FRi + 181S	FRX+181
Application	Installation	Ceiling Installation	Installation	Installation
Woofer Type	1 x 12″ slot loaded	1 x 10″	1 x 18″	1 x 18″
Power Handling cont.	2 x 175 W	150 W	400 W	400 W
Sensitivity(1W1m)	100 dB**	94 dB*	97 dB/103 dB*	96 dB/102 dB*
Max. SPL (peak)	125 dB **	122 dB *	129 dB/135 dB*	128 dB /134 dB*
Internal X-Over	stereo w/ hi-pass out	lowpass	no	no
Flying	no	no	eyebolts	L-track
Dimensions H/W/D (mm)	412 x 584 x 305 mm 16.22″ x 23″ x 12″	320 mm diameter 12.6″ diameter	711 x 597 x 762 mm 27″ x 23.5″ x 30″	787 x 719 x 660 mm 31″ x 28.3″ x 26″
Weight	18.1 kg (39.9 lbs.)	7 kg (15.4 lbs.)	45.5 kg (100.3 lbs.)	45.5 kg (100.3 lbs.)

	Eliminator i Sub	Eliminator KW	Sb 121	SbA 760
Application	Pro Music	Pro Music	Pro Music, Installation	Pro Music, Installation
Woofer Type	1 x 18″	2 x 18″	1 x 12″	1 x 15″
Power Handling cont.	400 W	1000 W AES	300 W	760 W amplifier
Sensitivity(1W1m)	98 dB/104 dB*	101 dB/107 dB*	95 dB/101 dB*	
Max. SPL (peak)	130 dB/136 dB*	137 dB/143 dB*	126 dB/132 dB*	128 dB/134 dB*
Internal X-Over	lowpass	no	no	built-in active X-Over
Flying	no	no	optional SX Hardware	no
Dimension H/W/D (mm)	856 x 429 x 609 33.7″ x 16.9″ x 24″	1140 x 569 x 597 44.9″ x 22.4″ x 23.5″	586 x 429 x 312 23.1″ x 16.9″ x 12.3″	603 x 428 x 665 23.7″ x 16.9″ x 26.2″
Weight	33.6 kg (74 lbs.)	65.8 kg (145 lbs.)	14.6 kg (32.2 lbs.)	43 kg (94.8 lbs.)

* 1/2-space SPL, ** 1/4-space SPL

Subwoofers

QRx118S

MTL1X

QRx218S

XDS

Application	Pro Music Concert Sound	Pro Music Concert Sound	Pro Music Concert Sound	Concert Sound
Woofer Type	1 x 18″	2 x 18″	2 x 18″	2 x 18″
Power Handling cont.	600 W	1200 W	1200 W	1200 W
Sensitivity(1W1m)	98 dB /104 dB*	101 dB /107 dB*	99 dB /105 dB*	100 dB /106 dB*
Max. SPL (peak)	132 dB /138 dB*	137 dB / 141 dB*	134 dB /140 dB*	137 dB /143 dB*
Internal X-Over	no	no	no	no
Flying	no	no	optional	no
Dimensions H/W/D	900 x 450 x 600 mm 35.4″ x 17.7″ x 23.6″	1160 x 572 x 758 mm 45.8″ x 22.5″ x 29.9″	990 x 560 x 600 mm 39″ x 22″ x 23.6″	914 x 1166 x 759 mm 36″ x 45.9″ x 29.9″
Weight	47.5 kg (104.7lbs.)	48.5 kg (106.9 lbs.)	56.5 kg (124.6 lbs.)	121 kg (266.8 lbs.)

Xi-2181(F)

Xsub(F)

XLC 118

Plasma P2

Application	Installation Concert Sound	Concert Sound Installation	Concert Sound Installation	Concert Sound Installation
Woofer Type	1 x 18″	2 x 18″	1 x 18″	1 x 18″
Power Handling cont.	600 W	1200 W	600 W	600 W
Sensitivity(1W1m)	94 dB /100 dB*	100 dB /106 dB*	96 dB /102 dB*	built in Amplifier 800W
Max. SPL (peak)	128 dB /134 dB*	137 dB /143 dB*	130 dB /136 dB*	126 dB /132 dB*
Internal X-Over	no	no	no	Lowpass 100 Hz
Flying	L-track in F-version	X-Line rigging, F-vers.	XLC rigging	
Dimension H/W/D	914 x 586 x 759 mm 36″ x 23.1″ x 29.9″	494.3 x 1245 x 740 mm 19.5″ x 49″ 29.1″	546 x 991 x 572 mm 21.5″ x 39″ x 22.5″	910 x 476 x 600 mm 35.8″ x 18.7 x 23.6″
Weight	68 kg (149.9 lbs.)	92 kg (202.8 lbs.)	54.5 kg (120.2 lbs.)	63.6 kg (140.2 lbs.)

* 1/2-space SPL

Cinema Systems

Cinema. In a medium generally thought of as visual, the quality of a cinema´s sound system is often what determines the "cinema experience" for the paying customer. For years Electro-Voice® has supplied loudspeaker systems to the cinema industry which meet or exceed standards set by THX® and Dolby® Laboratories. Every summer, with the release of the latest blockbuster action film, new benchmarks for acoustic performance are set, and EV continues to meet these demands with new innovations.

At Electro-Voice we offer the engineering knowledge and expertise to design and manufacture products "from the ground up." EV loudspeakers are conceived at the component level and integrated into high-performance screen channel, surround and subwoofer systems. We are committed to developing new technologies and achieving new levels of performance for cinema loudspeaker systems.

Variplex II™ Systems

The Variplex™ is one example of the many EV systems which are THX® approved. They join the large, diverse family of Electro-Voice cinema products developed for cinemas both large and small. This wide range of products and time-proven acoustic excellence means that you can design systems that "fit" any room, and more importantly, that the "cinema experience" will be the best your customers have ever heard. And take note: The THX®-approved, high-quality CPS Series amplifiers are part of this formula for success.

Variplex II™

- Three-way stage system
- Vari-Intense® technology provides uniform front-to-back coverage
- Ring-Mode Decoupling™ improves vocal clarity and intelligibility
- Variplex™ B model features passive MB/HF crossover for biamping
- THX® approved
- Digital Dynamics Capable™

RMD™ THX CINEMA

Variplex II™ XL

- Three-way, high-output stage system
- High-output MB and HF drivers
- Vari-Intense® technology provides uniform front-to-back coverage
- Ring-Mode Decoupling™ improves vocal clarity and intelligibility
- THX® approved
- Digital Dynamics Capable™

RMD™ THX CINEMA

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(not shown)

SPECIFICATIONS	Variplex II XL	Variplex II	Variplex M
Frequency Range	34 Hz - 16 kHz	34 Hz - 16 kHz	45 Hz - 18 kHz
Sensitivity, 1W/1m (LF/MF/HF)	104/109/112 dB	101/109/112 dB	104 dB
Max.SPL/1m (calc.) (ave./peak)	130 / 136 dB	130 / 136 dB	127 / 133 dB
Crossover Frequency	500Hz / 1300 Hz	500Hz / 1300 Hz	500 Hz
Long-term Power Handling (LF/MF/HF)	1600/400/75 W	800/400/75 W	500 / 300 W
Short-term Power Handling (LF/MF/HF)	6400/1600/300 W	3200/1600/300 W	2000 / 1200 W
Coverage Horizontal (long axis/short axis)	90°	90°	90°
Coverage Vertical (up/down)	20°/30°	20°/30°	20°/30°
HF driver	ND 6-8	ND6-8	DH2T
MF driver	2 x EV8DH	2 x EV8DH	2 x EV8D
LF driver	4 x DL15ST	2 x DL15ST	2 x EV15G
Nominal Impedance	2 x 4 / 4 / 8 Ohms	4 / 4 / 8 Ohms	4 / 4 Ohms
Dimensions (Height/Width/Depth)	1924 x 1296 x 396 mm 75.8" x 51" x 15.6"	1924 x 648 x 396 mm 75.8" x 25.5" x 15.6"	1924 x 648 x 396 mm 75.8" x 25.5" x 15.6"
Weight (net)	139 kg (306.4 lbs.)	74 kg (163.1 lbs.)	72,6 kg (160.1 lbs.)

Two-Way Systems

Electro-Voice® two-way screen systems offer flexibility in size and high-quality sound output for a variety of cinema applications. The TS9040D-LX and the TS550D-LX, both large-format systems, feature very high efficiency and are THX®-compatible. The medium-format TS940D includes a passive crossover, and the small-format TS992E's innovative flat-cabinet design saves considerable space behind the screen. For efficiency, wide-ranging application solutions, and incredible sound quality, nothing beats EV screen systems.

TS9040D-LX

- Large-format, two-way screen system
- Provides excellent acoustical performance in large or small rooms.
- THX® approved
- Digital Dynamics Capable™
- Wide, smooth frequency response

TS940D

- Medium-format, two-way screen system
- HP940T horn/ND6 driver
- XEQ-504 crossover for single-channel operation
- Smooth, accurate sound
- Passive crossover for single-channel operation

TS992M

- Small-format, two-way screen system
- DH2T HF on 90 x 50 horn
- EV15G LF system
- 10" depth: low-profile system (254 mm)

SPECIFICATIONS	TS550D-LX (not shown)	TS9040D-LX	TS940D	TS992M
Frequency Range	30 Hz - 20 kHz	32 Hz - 20 kHz	32 Hz - 20 kHz	38 Hz - 18 kHz
Sensitivity, 1W/1m (LF/HF)	100 / 111 dB	100 / 111 dB	100 dB	100dB
Max.SPL/1m (calc.) (ave./peak)	131 / 137 dB	129 / 135 dB	129 / 135 dB	130 dB
Crossover Frequency	500 Hz	500 Hz	500 Hz, internal	1300 Hz, internal
Long-term Power Handling (LF/HF)	1.200 / 75 W	800 / 75 W	800 W	300 W
Short-term Power Handling (LF/HF)	4.800 / 300 W	3.200 / 300 W	3.200 W	1.200 W
Coverage (H x V)	90° x 40°	90° x 40°	90° x 40°	90° x 50°
HF driver	ND6X-8	ND6X-8	ND6-X	DH2T
LF driver	2 x EVX155	2 x DL15ST	2 x DL15ST	EV15-G
Nominal Impedance	4 / 8 Ohms	4 / 8 Ohms	4 Ohms	8 Ohms
Dimensions (Height/Width/Depth)	1816 x 681 x 947 mm	1816 x 681 x 947 mm	1354 x 572 x 447 mm	1200 x 660 x 254 mm
	71.5" x 26.8" x 37.3"	71.5" x 26.8" x 37.3"	53.3" x 22.5" x 17.6"	47.2" x 26" x 10"
Weight (net)	74,8 kg (164.9 lbs.)	74,8 kg (164.9 lbs.)	60.4 kg (133.1 lbs.)	35 kg (77.2)

Cinema Systems

Subwoofers

Subwoofers offer a variety of low-frequency solutions for general fixed installation or additional LF supplementation in existing installations. Low-frequency systems have f3s (the point at which response is -3 dB down) as low as 40 Hz. In general, response below 40 Hz is required for theatrical effects, full reproduction of pipe organs, and some special effects in contemporary music such as synthesizers and down-tuned bass guitars. The TL 880D is especially suited for this special type of application.

Note: TL subwoofers have unprotected fronts and woofers, and should be used in inaccessible areas only.

TL880D

- Very-low-frequency subwoofer
- Direct radiating vented design
- High acoustic output to below 20 Hz (-10 dB) allows real low end effects
- THX® approved

TL440

- Very-low-frequency subwoofer
- Direct radiating vented design
- High acoustic output featuring single EVX180B woofer
- THX® approved

TL440M

- Very-low-frequency subwoofer
- Direct radiating vented design

TL18-1ES

- Low-frequency subwoofer
- Direct radiating vented design
- 38 Hz low end for rich bass
- Ultrathin depth

(not shown)

SPECIFICATIONS	TL880D	TL880DM	TL440	TL440M	TL18-1ES
Frequency Range	23 Hz - 1.8 kHz	27 Hz - 1.8 kHz	33 Hz• - 3.2 kHz	38 Hz• - 3.2 kHz	38 Hz - 2.0kHz
Sensitivity, 1W/1m (full/half-space)	99 / 105 dB	99 / 105 dB	96 / 102 dB	96 / 102 dB	96 / 102 dB
Max.SPL/1m (calc.) (ave./peak)	136 / 162 dB	133 / 137 dB	130 / 136 dB	128 / 133 dB	128 / 134 dB
Long-term Power Handling	1.200 W	800 W	600 W	350 W	400W
Short-term Power Handling	4.800 W	3.200 W	2.400 W	1.500 W	1.600 W
Coverage (<125 Hz)	omnidirectional	omnidirectional	omnidirectional	omnidirectional	omnidirectional
LF driver	2 x EVX180B	2 x EVS-18S	1 x EVX 180B	EV518S	1 x DL18-MT
Nominal Impedance	4 Ohms	4 Ohms	8 Ohms	8 Ohms	8 Ohms
Dimensions (Height/Width/Depth) in mm	1210 / 762 / 605	1207 / 762 / 605	1003 / 572 / 559	1003 / 572 / 559	1193 / 680 / 254
Weight (net)	72,6kg	70,8kg	49 kg	49 kg	43kg

•) 24Hz in step-down mode

Cinema Systems

Surround Loudspeakers

SL12-2V

SL10-2V

- High-output, two-way surround loudspeaker
- Versatile suspension and safety options
- 15° slanted cabinet
- Exceptionally wide and smooth frequency response
- SL10-2V model has 10" woofer
- SL10-2V includes wall mounting brackets
- THX® compatible
- Digital Dynamics Capable™

SL6.2M

- Full-Bandwidth overload protection
- Strong-Arm-Mount™ for easy, flexible aiming
- Lightweight, unobtrusive plastic enclosure
- Easy-access input terminals

SPECIFICATIONS	SL10-2V	SL12-2V	SL6.2M
Frequency Range	60Hz - 20 kHz	70Hz - 20 kHz	48Hz - 20 kHz
Sensitivity, 1W/1m	93 dB	93 dB	90 dB
Max.SPL/1m (calc.) (ave./peak)	113 / 119 dB	116 / 121 dB	111 / 177 dB
Long-term Power Handling	100 W	200W	125 W
Short-term Power Handling	400 W	800 W	500 W
Coverage (H x V)	100° x 100°	100° x 90°	100° x 100°
LF driver	10" woofer	12" woofer	6" woofer
HF driver	1" compression driver	DH2010A	1" driver on waveguide
Nominal Impedance	8 Ohms	8 Ohms	8 Ohms
Dimensions (Height/Width/Depth) in mm	476 x 318 x 275	535 x 476 x 335	419 x 228 x 198 mm
	18.75" x 12.5" x 10.8"	21" x 18.7" x 13"	61.5" x 9" x 11.7"
Weight (net)	10,5 kg (23.1 lbs.)	21,4 kg (47 lbs.)	4.5 kg (10 lbs.)

Outdoor Speakers

From the EVID™ 3.2 to the Sx500PI+, EV offers excellent solutions for outdoor speaker needs. EV®'s Sx-Series (PI and PIX) bring the sound of indoor speakers out into the fresh air, and can be used for portable and fixed installations such as major theme parks. The new EVID line provides visual style and audio substance not only indoors, but also in any outdoor environment and in humid indoor environments such as pools and saunas. Both families include transformer options.

Sx80PI/PIX

Sx80PI/PIX

- Ultracompact two-way, 8-inch, short-throw system
- Black powder-coated full-face stainless steel grille, with foam backing and a polyester mesh water shield
- Paintable, black polystyrene enclosure
- 70.7/100-volt 60-watt transformer option with selectable taps (Sx80PIX)

Sx300PI/PIX

Sx300PI/PIX

- Compact two-way, 12-inch, medium-throw full-range system
- Full-face, black powder-coated stainless steel grille, backed by a foam water shield, gives smooth appearance and a high degree of weather resistance
- 70.7/100-volt 100-watt transformer option with selectable taps (Sx300PIX)

Sx500PI+

Sx500PI+

- Two-way, 15-inch, medium-throw, full-range system
- A baseball stadium favorite
- Black powder-coated full-face stainless steel grille, with foam backing and a polyester mesh water shield
- 500 Hz directional control from vented LF horn

Sx600PI/Sx600PIX

- Tw- element vertical line array
- Very high sensitivity (105 dB/1W/1m)
- High intelligibility
- Two 12" woofers
- DH2T driver on 65x65 degree Varipath horn
- All weather cabinet
- Super SAM mounting, 60° x 180° adjustable
- Waterproof connection by SJO cable with glandnut
- Internal 600 Watt transformer available (SX600PIX)

Sx600PI

EVID 4.2/4.2T

- Two-way full range
- 1" voice coil (titanium diaphragm) with Neodymium magnetic structure
- Full bandwidth overload protection for HF and LF
- Three-dimensional elliptic (for compact look)
- Comes with Strong Arm Mount (SAM™) and a hex-key
- Suspension insert for SAM™, safety point on rear side

EVID 6.2/6.2T

- Two-way, high-output full range
- High sensitivity
- 1" voice coil (titanium diaphragm) with Neodymium magnetic structure
- Full bandwidth overload protection for HF and LF
- Three-dimensional ellipse (for compact look)
- Comes with Strong Arm Mount (SAM™) and a hex key
- Suspension insert for SAM™; safety point on rear side

Underwater loudspeaker

The UW 30 represents a departure from conventional designs of underwater sound sources. Its unique, patented design uses the case´s structural enclosure as the sound transducer. Underwater speakers are required equipment for many activities in commercial, luxury resort pools and synchronized swimming events or instructions in Olympic pools. They are used for water ballets and similar water shows. UW 30 has a high-fidelity sound with low distortion, and the effect of music played underwater through it is truly enchanting.

The outer case of UW 30 is made of high-impact ABS and is pool-blue in color. All internal components are sealed inside the speaker through a "hot-melt" process, allowing it to be used in fresh- or salt-water pools or ocean enviroments. Sound dispersion is up to 30 x 30 feet (10 x 10 m) under water. Operating depth is up to 10 feet (3 m), with a recommended depth of 4 feet (1.2 m). Note: For overload protection, install a 25-ohm, 20-watt resistor in parallel with a 1.5-amp, fast-blowing fuse in series with the speaker.

UW 30

- Full-range underwater sound source
- Uniform sound throughout medium-sized pools
- Very high-fidelity sound
- Salt-water resistant
- Comes with a 50-foot (15-m), three-conductor waterproof cable terminated within the internal encapsulation material

Ultracompact monitor system

EV®'s S-40 produces maximum frequency response with an extended bass response. The sensitivity, therefore, is slightly less than with a regularly tuned box. The S-40 is made of black or white high-impact polystyrene structural foam protected with a full-size, matching front grille.

S-40 B

- Two-way, full-range ultracompact
- Ultra-linear frequency response
- Vented LF enclosure
- Full bandwidth protection circuit for woofer and tweeter
- Ferrofluid-cooled soft-dome tweeter
- Trapezoidal
- 2 x 1/4"–20 suspension points

wh white

mounting hardware

SPECIFICATIONS

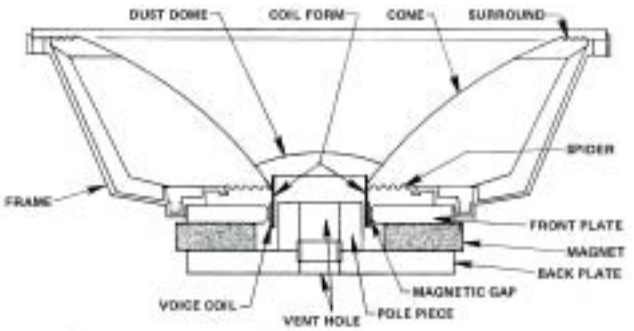
	UW 30	S-40
Frequency range	100 Hz–10 kHz	85 Hz–20 kHz (+/- 3dB)
Sensitivity (SPL 1W/1m)	—	85 dB
Max. SPL/1m (calc.)	—	113 dB
Long-term power handling	30 W	160 W
Short-term power handling	—	640 W
Coverage (H° x V°)	omni (underwater)	100° x 100°
Directivity Index		9.8 dB (+3.8/-3.6 dB)
	—	2 kHz–20 kHz
LF driver	special type	5.25"
HF driver	—	1" Softdome
Crossover frequencies	—	3,500 Hz
Nominal impedance (low Z version)	8 Ω	4 Ω
Minimum impedance (low Z version)	—	3.7 Ω
Input connections	waterproof cable	spring terminal
Dimensions (H x W at front x D)	183 mm [diameter] x 66 mm [D] (7.19" [diameter] x 2.61" [D])	249 x 178 x 150 mm (9.8" x 7" x 5.9")
Net weight (including mounting bracket)	1.8 kg (4 lbs.)	2.6 kg (5.7 lbs.)

Components

Woofers

EV component woofers are high-efficiency designs highly refined from years of development and field experience. They employ extended-length voice coils for high-impact reproduction of dynamic low-frequency program. All woofers feature proprietary heat-transfer systems for unmatched power capacity and reliability. Kevlar®-fiber-composite cones are used to provide structural strength to resist collapse during explosive dynamic peaks and to provide internal mechanical damping to minimize resonances that can change the character of the sound at high levels. DL and EVX woofers are made of cast aluminium frames with push terminals, and all feature Ring-Mode Decoupling™ (RMD™) except for the DL18MT and the EVX180B.

Speaker Parts



SPECIFICATIONS	DL10X	DL12BFH	DL12ST	DL15BFH	DL15ST
Cone diameter	10" (254 mm)	12" (305 mm)	12" (305 mm)	15" (381 mm)	15" (381 mm)
Coil diameter	2.5" (63.5 mm)	2.5" (63.5 mm)	2.5" (63.5 mm)	2.5" (63.5 mm)	2.5" (63.5 mm)
Impedance	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω
Frequency range	100–2,000 Hz	60–2,500 Hz	60–2,000 Hz	45–2,000 Hz	45–2,000 Hz
Long-term power rating (EIA)	300 W	300 W	300 W	350 W	400 W
Short-term power rating	1,200 W	1,200 W	1,200 W	1,400 W	1,600 W
Sensitivity (1 W @ 1 m)	98 dB	96 dB	98 dB	96 dB	95 dB
Maximum SPL	122.8 dB	120.8 dB	122.8 dB	121.4 dB	121.0 dB
Efficiency	5.92%	3.69%	5.60%	3.93%	2.66%
Frame front diameter	259.5 mm (10.22")	309.6 mm (12.19")	309.6 mm (12.19")	305.0 mm (15.16")	305.0 mm (15.16")
Magnet diameter	190.5 mm (7.50")	155.6 mm (6.13")	190.5 mm (7.50")	155.6 mm (6.13")	190.5 mm (7.50")
Overall depth	114.3 mm (4.50")	133.4 mm (5.25")	133.4 mm (5.25")	152.4 mm (6.00")	158.8 mm (6.25")
Mounting bolt circle diameter	244.5 mm (9.625")	293.7 mm (11.563")	293.7 mm (11.563")	369.9 mm (14.563")	369.9 mm (14.563")
Baffle cutout diameter	230.2 mm (9.063")	281.0 mm (11.063")	281.0 mm (11.063")	357.2 mm (14.063")	357.2 mm (14.063")
Net weight	6.5 kg (14.3 lbs.)	5.0 kg (11.1 lbs.)	6.7 kg (14.7 lbs.)	5.4 kg (12.0 lbs.)	6.9 kg (15.2 lbs.)

SPECIFICATIONS	DL18MT	EVX155	EVX180B
Cone diameter	18" (457 mm)	15" (381 mm)	18" (457 mm)
Coil diameter	2.5" (63.5 mm)	4" (101.6 mm)	4" (101.6 mm)
Impedance	8 Ω	8 Ω	8 Ω
Frequency range	35–800 Hz	40–2,000 Hz	30–800 Hz
Long-term power rating (EIA)	400 W	600 W	600 W
Short-term power rating	1,600 W	2,400 W	2,400 W
Sensitivity (1 W @ 1 m)	96 dB	98 dB	98 dB
Maximum SPL	122.0 dB	125.8 dB	125.8 dB
Efficiency	2.9%	4.32%	3.4%
Frame front diameter	460.5 mm (18.13")	385.0 mm (15.16")	460.5 mm (18.13")
Magnet diameter	190.5 mm (7.50")	209.6 mm (8.25")	8.25" (209.6 mm)
Overall depth	177.8 mm (7.00")	184.2 mm (7.25")	203.2 mm (8.00")
Mounting bolt circle diameter	441.3 mm (17.375")	369.9 mm (14.563")	441.3 mm (17.375")
Baffle cutout diameter	425.5 mm (16.750")	357.2 mm (14.063")	425.5 mm (16.750")
Net weight	7.2 kg (15.8 lbs.)	10.3 kg (22.8 lbs.)	10.6 kg (23.4 lbs.)

Components

Compression Drivers

Electro-Voice is one of a handful of professional audio companies that can design high-performance compression drivers. Compression drivers are the most difficult audio transducers to design. Their unique requirements call for ultraprecise tolerances, state-of-the-art modeling routines, and exceptionally talented engineering expertise. Manufacturing techniques are frequently pushed to process limits, and materials are formed and stabilized with cutting-edge systems and controls. Each EV compression driver's parameters are tightly controlled to ensure world-class performance, thus putting the drivers at the top of their class in every respect.

DH7-8/DH7-16

- Large-format ceramic compression driver
- 300-watt power rating
- 3" titanium diaphragm
- 1.4" or 2" exit diameter for use on almost any high-performance horn
- Excellent for use with direct-radiator or horn-loaded LF and MB sections

ND6-8/ND6-16/ND6X

- Large-format neodymium compression driver
- 300-watt power rating
- 3" titanium diaphragm
- 1.4" or 2" exit diameter for use on almost any HP horn
- EV's highest-performance compression driver gives world-class performance in any application
- ND6X from > 500Hz

DH2T

- One-inch exit screw-on, medium-format compression driver
- 160-watt power rating
- 2" titanium diaphragm
- High performance on a wide variety of thread-on horn designs

DH3/DH2010A

- One-inch exit screw-on, small-format compression driver
- 80-watt power rating
- 1.25" titanium diaphragm
- Excellent extended-bandwidth HF driver for multi-way loudspeaker systems

Horn Adaptors

from 1.4" bolt-on to 2" bolt-on ADH6
from 1" screw-on to 2" bolt-on ADH5
from 1" screw-on to 1.4" bolt-on ADH3

SPECIFICATIONS	DH7-8/DH7-16	ND6-8/ND6-16	DH2T	DH3/DH2010A
Frequency response	1,000 Hz–20 kHz	1,000 Hz–20 kHz / 500Hz-16kHz (ND6X)	1,200 Hz–20 kHz	1,500 Hz–20 kHz
Crossover frequency (minimum)	1,000 Hz	1,000 Hz	1,200 Hz	1,500 Hz
Midband sensitivity*	111 dB	112 dB	112 dB	111 dB
Long-term power rating (AES)	75 W	75 W	40 W	20 W
Short-term power rating	300 W	300 W	160 W	80 W
Impedance	8/16 Ohms	8/16 Ohms	8 Ohms	8 Ohms
Throat diameter	35 mm adaptor (1.4"/2.0")	35 mm adaptor (1.4"/2.0")	25 mm ()	1.0" (25 mm)
Diaphragm diameter	76 mm (3.0")	76 mm (3.0")	50 mm (2.0")	32 mm (1.25")
Overall diameter	165 mm (6.5")	132 mm (5.2")	132 mm (5.2")	107 mm (4.5")
Overall depth	69 mm (2.7")	69 mm (2.7")	89 mm (3.5")	89 mm (3.5")
Net weight	4.54 kg (10.0 lbs)	2.5 kg (5.5 lbs)	2.27 kg (5.0 lbs)	1.5 kg (3.4 lbs)

*Average from 1,000 Hz–5 kHz on HP6040 horn (DH3 average from 1,500 Hz–5 kHz on HPT64 horn)

HP Horns

The HP horn series is a refinement of the concept of "constant directivity," which, in 1974, EV was the first to introduce. For the first time, horn coverage angles were truly uniform over a wide frequency range. In the HP series, unique beamwidth-control vanes within the horn throat form a waveguide that eliminates the narrowing of coverage angle – beaming – that occurs in other 2-inch-throat horns. EV's patented Transplanar™ design provides exceptionally smooth frequency response. HP horns or variants thereof are used throughout the EV speaker system lines. Each HP horn features an integral die-cast metal throat encapsulated in the fiberglass sidewalls. This unitized construction provides very high strength and low weight.

Note: Horns shown out of proportion to each other

HP6040

HP640

HPT64

HP64

HP4020
HP6040
HP9040

- Large-format two-inch horns
- The ultimate in dispersion control, with control of rated dispersion angle down to 500 Hz, both horizontally and vertically
- Directivity control to 500 Hz maximizes vocal intelligibility and musical clarity in difficult acoustic environments

HP420
HP640
HP940
HP1240

- Medium-format two-inch horns
- Vertical dimensions have been reduced, for use when space constraints preclude the use of large-format horns
- Horizontal directional control maintained to ~500 Hz
- Vertical control to ~1,500 Hz

HP64
HP66
HP94

- Small-format two-inch horns
- Use as primary HF horns in compact sound systems
- Beamwidth control to ~2,000 Hz

HPT64
HPT94

- Very-small-format one-inch horns
- Use in three- and four-way systems with DH3 driver for tweeter and supertweeter applications
- Directional control to 3,000 Hz

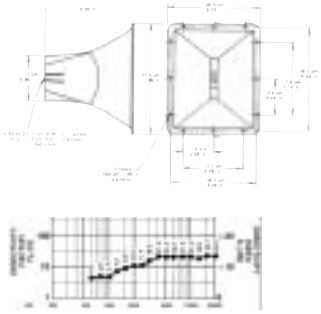
SPECIFICATIONS	HP4020	HP6040	HP9040	HP420	HP640	HP940
Coverage (H° x V° nominal)	40° x 20°	60° x 40°	90° x 40°	40° x 20°	60° x 40°	90° x 40°
Directivity Factor (average)	45.1 (+12.7, -18.9) (500 Hz–20 kHz)	25.8 (+17.9, -5.9) (500 Hz–20 kHz)	12.1 (+4.6, -3.7) (500 Hz–20 kHz)	47.7 (+25.9, -23.5) (1,250 Hz–20 kHz)	20.6 (+11.3, -3.3) (1,250 Hz–20 kHz)	11.9 (+3.6, -3.0) (1,250 Hz–20 kHz)
Directivity Index (average)	16.4 dB (+1.2, -2.2) (500 Hz–20 kHz)	14.1 dB (+2.3, -1.1) (500 Hz–20 kHz)	10.8 dB (+1.4, -1.6) (500 Hz–20 kHz)	16.8 dB (+1.9, -3.0) (1,250 Hz–20 kHz)	13.1 dB (+1.9, -0.7) (1,250 Hz–20 kHz)	10.7 dB (+1.2, -1.2) (1,250 Hz–20 kHz)
Useable low-frequency limit	200 Hz	500 Hz	400 Hz	400 Hz	400 Hz	400 Hz
Throat entrance	2" bolt-on	2" bolt-on	2" bolt-on	2" bolt-on	2" bolt-on	2" bolt-on
Height	838 mm (33.0")	813 mm (32.0")	813 mm (32.0")	367 mm (14.4")	330 mm (13.0")	330 mm (13.0")
Width	813 mm (32.0")	711 mm (28.0")	679 mm (26.75")	610 mm (24.0")	711 mm (28.0")	533 mm (21.0")
Depth	1,252 mm (49.3")	808 mm (31.8")	808 mm (31.8")	749 mm (29.5")	437 mm (17.2")	285 mm (11.2")
Net weight	12.3 kg (27.0 lbs)	9.1 kg (20.0 lbs)	9.1 kg (20.0 lbs)	5.9 kg (13.0 lbs)	4.3 kg (9.5 lbs)	3.2 kg (7.0 lbs)

SPECIFICATIONS	HP1240	HP64	HP66	HP94	HPT64	HPT94
Coverage (H° x V° nominal)	120° x 40°	60° x 40°	60° x 60°	90° x 40°	60° x 40°	90° x 40°
Directivity Factor (average)	8.6 (+2.5, -2.1) (1,250 Hz–20 kHz)	18.1 (+4.1, -8.8) (1,600 Hz–20 kHz)	17.9 (+10.5, -9.3) (1,600 Hz–20 kHz)	10.1 (+5.8, -1.8) (1,600 Hz–20 kHz)	15.8 (+5.2, -4.9) (3,150 Hz–20 kHz)	11.6 (+5.0, -2.5) (3,150 Hz–20 kHz)
Directivity Index (average)	9.34 dB (+1.1, -1.2) (1,250 Hz–20 kHz)	12.6 dB (+0.9, -2.9) (1,600 Hz–20 kHz)	12.5 dB (+2.0, -3.0) (1,600 Hz–20 kHz)	10.0 dB (+2.0, -0.8) (1,600 Hz–20 kHz)	12.0 dB (+1.2, -1.6) (3,150 Hz–20 kHz)	10.6 dB (+1.6, -1.0) (3,150 Hz–20 kHz)
Useable low-frequency limit	400 Hz	650 Hz	650 Hz	800 Hz	1,600 Hz	1,600 Hz
Throat entrance	2" bolt-on	2" bolt-on	2" bolt-on	2" bolt-on	1" bolt-on	1" bolt-on
Height	330 mm (13.0")	279 mm (11.0")	279 mm (11.0")	279 mm (11.0")	133 mm (5.25")	133 mm (5.25")
Width	533 mm (21.0")	224 mm (8.8")	224 mm (8.8")	222 mm (8.75")	133 mm (5.25")	133 mm (5.25")
Depth	265 mm (10.4")	220 mm (8.7")	165 mm (6.5")	220 mm (8.7")	104 mm (4.1")	101 mm (4.0")
Net weight	3.2 kg (7.0 lbs)	2.5 kg (4.5 lbs)	2.2 kg (4.8 lbs)	2.5 kg (4.5 lbs)	0.4 kg (0.8 lbs)	0.4 kg (0.8 lbs)

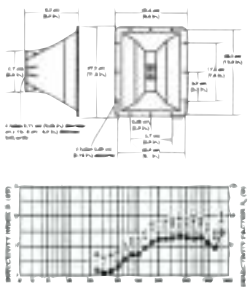
HP Horns

Small format horns

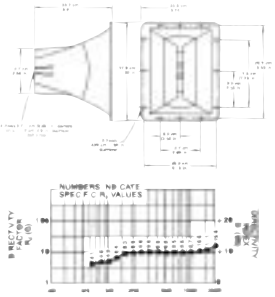
HP 64



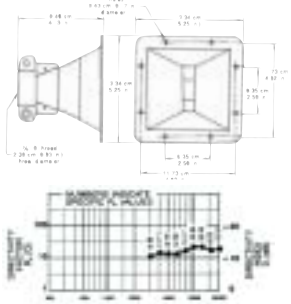
HP 66



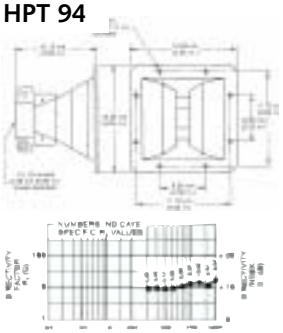
HP 94



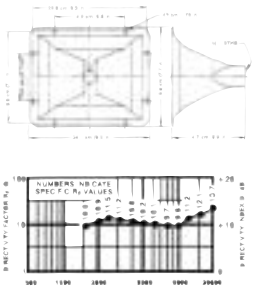
HPT 64



HPT 94

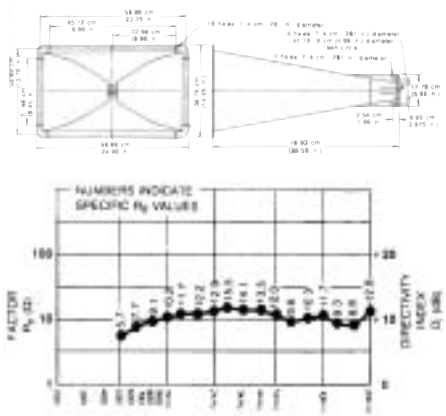


HT 94

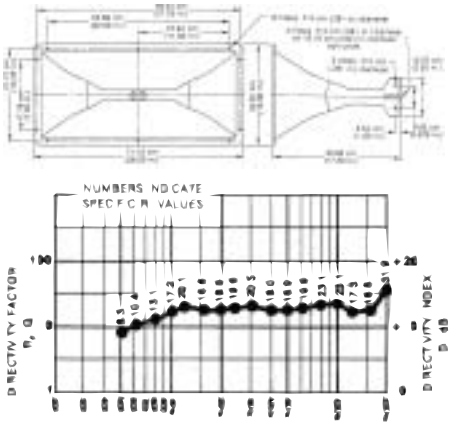


Medium format horns

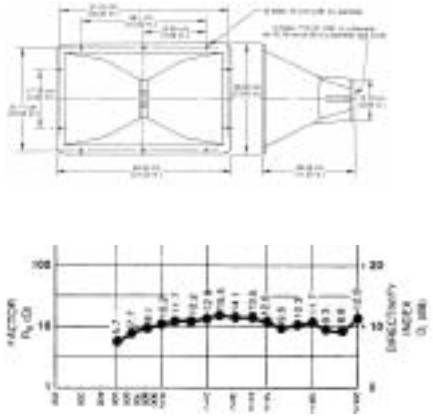
HP420



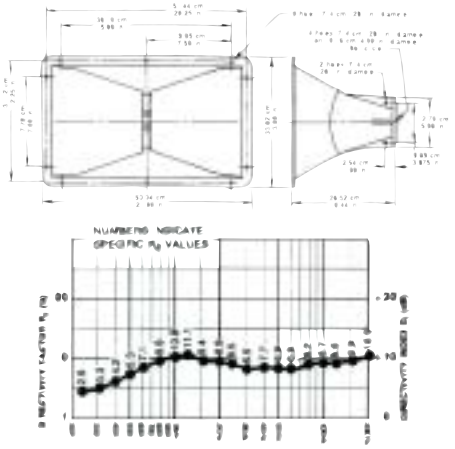
HP640



HP940



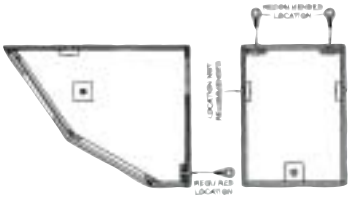
HP1240



Flying Hardware

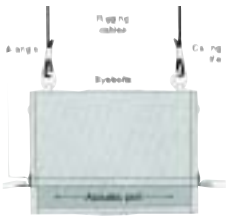
EVI 12/15

EBK-1 (Eyebolt-Kit)



EVID 12.1

1 Eyebolt is included.



Note: One 3/8"-16-thread forged steel eyebolt is included. A second is necessary!

FRi

4 Eyebolts included

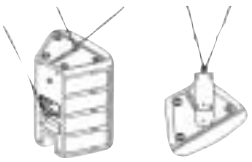
FRX Systems
(Except FRX-122)

Single stud kit included

Sx 100/300
Sb 121

1) MB 100
2) MB 100 + MB 200

Security advice:
When flown by 90° (figure 2) don't use eyebolts only!



1) 2)

Sx 500 +

MB 700 - Kit contains:

3 lifting eyebolts
1 mounting plate
1 pull-up mounting plate

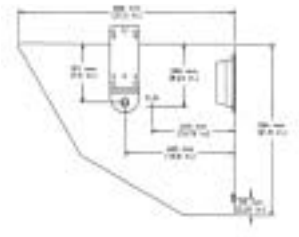
Security advice:
Do not screw MB 100 directly into M8 thread!

Note: Flying and suspending of speakers requires authorized personnel

Mounting hardware

wh white

EVI-12 Ceiling mount

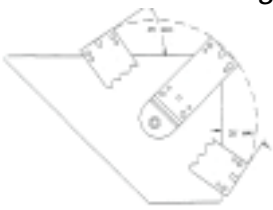


EVI-12MBB black
EVI-12MBW white

EVI-15 Ceiling mount

EVI-15MBB black
EVI-15MBW white

EVI-28 Wall or ceiling mount



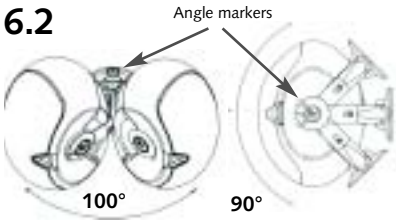
The radius of action is 140°.

EVI-28MBB black
EVI-28MBW white

wh white

EVID 3.2 / 4.2 / 6.2

SAM™ **comes with each EVID™** system and includes a hex-key-tool. SAM™ has angle markers to make installation easier.



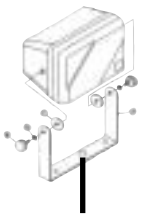
EVID 12.1

Bracket passes EIA 636 at a safety factor of 8:1.
The bracket for on-wall or corner mounting and a safety eyebolt comes with EVID 12.1.

wh white

S-40

Wall, ceiling or stand mount

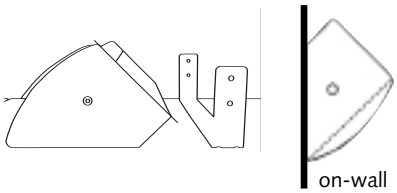


Note: The threat diameter can be reduced with a standard 5/8-inch screw adapter for different mic stands.

S-40 MB/B: black
S-40 MB/W: white

FRi-2082

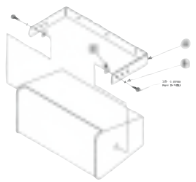
Under balcony or on-wall mount



The 100° x 100° dispersion angle allows one to install FRi-2082 vertically on the wall as well. Mounting bracket **comes with FRi-2082.**

Xi- 1082

Under balcony or on-wall mount



MB-1082: black

wh white

Sx 80

Wall or ceiling mount

For cost effective installation.

Sx 80 MBB black
Sx 80 MBW white

Sx 250/SxA250

Sk-1 Rigging Kit

Stand mount

For speakers stands with 35 mm diameter.

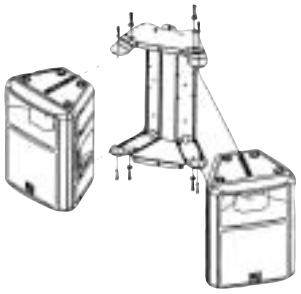
Sx 80 SM black

Note: Flying and suspending of speakers requires authorized personnel

Sx 100 / Sx 300 / Sb 121

Horizontal Cluster 120° (2 systems)

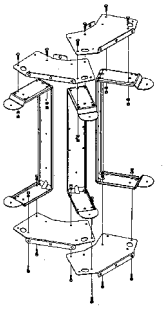
wh white



2 x MB 200 + 1 x MB 300 neccessary

Horizontal Cluster 180° (3 systems)

wh white



3 x MB 200 + 2 x MB 300 neccessary

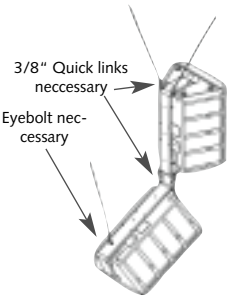
Wall or ceiling-mount

wh white

1 x MB 200 neccessary

Vertical Cluster

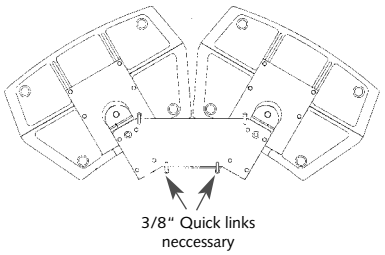
wh white



2 x MB 200 neccessary

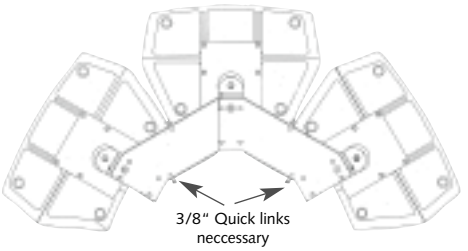
Sx 500 +

Horizontal Cluster 140° (2 systems)



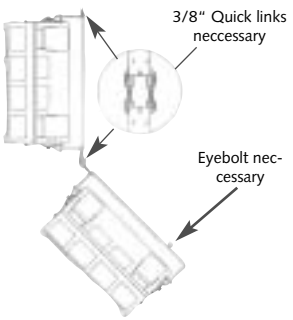
2 x MB 500 + 1 x MB 600 neccessary

Horizontal Cluster 210° (3 systems)



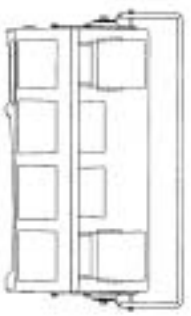
3 x MB 500 + 2 x MB 600 neccessary

Vertical Cluster



2 x MB 500 neccessary

Wall-mount



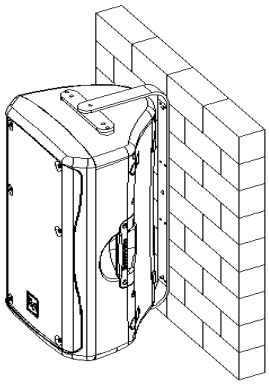
1 x MB 500 neccessary

Sx-Series™ hardware-overview:

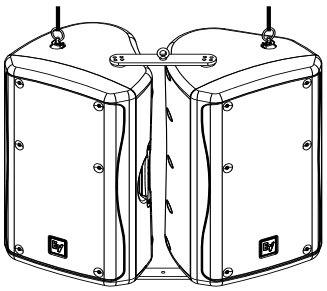
Sx 80	Sx 80 SM	Stand mount	black
	Sx 80 MBB	U-bracket	black
	Sx 80 MBW	U-bracket	white
Sx 100+	MB 200 B	U-bracket	black
	MB 200 W	U-bracket	white
Sx 300	MB 300 B	Array-kit (2 plates)	black
Sb 121	MB 300 W	Array-kit (2 plates)	white
Sx 500 +	MB 500	U-bracket	black
	MB 600	Array-kit	black

Note: Flying and suspending of speakers requires authorized personnel

ZX5

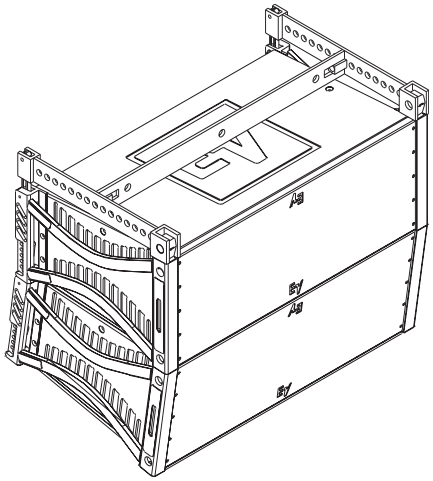


MB5 Wall/Ceiling mounting bracket



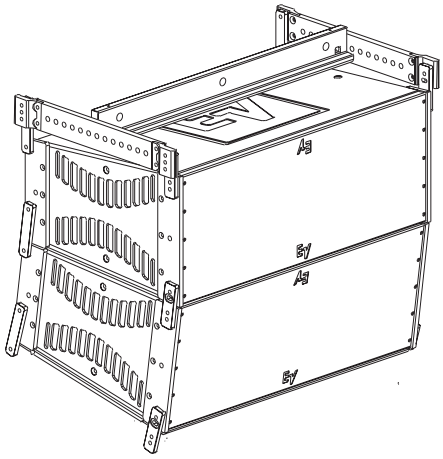
CB5 cluster bracket kit

XLC Rigging



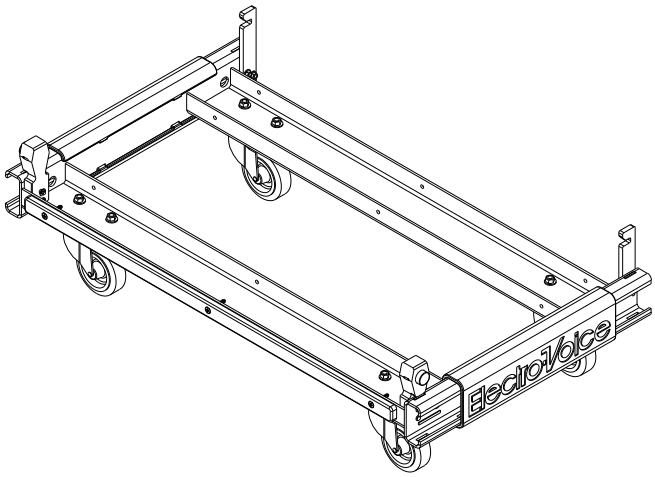
A-1 Grid for XLC
(other rigging hardware included with speaker)

XLCi Rigging

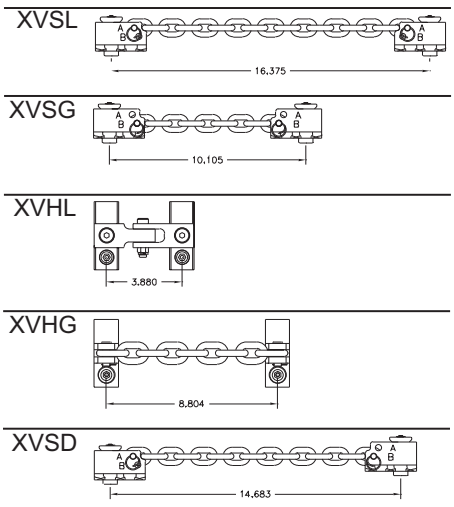


A-2 Grid for XLCi
(other rigging hardware included with speaker)

XLC Bottom Dolly



X-Line Rigging Accessories



Dx38 (Digital Sound System Processor)

Digital Sound System Processor

Dx38 sets standards for digital loudspeaker controllers and processors, providing 48-bit filter algorithms, 24-bit AD/DA conversion and a dynamic range of 115 dB. Dx38 can be used in networks of up to 31 controllers with a maximum networking distance of 1.000 meters. Real-time controlling and configuration is either via the front panel or PC via RS-232, MIDI or RS-485 bus for networking.

Dx38 is a 2-in/4-out controller with a "virtual" third input source. It has a mono sum of both input channels to maximize flexibility. Two configuration modes allow clearer handling for different qualified users. 30 user memories and 50 factory presets can be managed.
The Dx38 comes with a detailed manual plus RACE software which includes current EV speaker and amp data.

RS-485 Remote Interface for Dx38

Available Options and Accessories:

NRS 90244	Input transformer
NRS 90247	RS-485 network interface
NRS 90246	Contact Closure interface for external "User preset" selection; 8 contacts (pin 1-8: activation, pin 9: common)

SPECIFICATIONS	Dx 38
Controller type	2 (+1) in/4 out
Data format	24-bit linear AD/DA conversion 48-bit processing
A/D conversion	24-bit/sigma-delta (linear phase) 128 times oversampling
D/A conversion	24-bit/sigma-delta 128 times oversampling
Sampling rate	48 kHz
DSP type	2 x 24-bit Motorola
Frequency response	20 - 20 kHz (- 0.5 dB)
Dynamic Range (typical)	115 dB
THD (without input transformer)	< 0.01%
THD (with input transformer)	< 0.05%
Input connectors	2 XLR (elec. balanced), parallel out
Input voltage (nominal)	1.55V/+ 6 dBu
Maximum input voltage	24.5V/+30 dBu
Input impedance	20k ohms
Common mode rejection	> 40 dB
Output connectors	4 XLR (elec. balanced)
Output voltage (nominal)	1.55 V/+ 6 dBu
Maximum output voltage	8.7V/+ 21 dBu
Output impedance	< 100 ohms
Minimum load impedance	600 ohms
Frequency crossovers (slopes)	6, 12, 18, 24 dB/oct.
Frequency crossovers (designs)	Butterworth, Bessel, Linkwitz-Riley
Filters (In- and Outputs)	26 (full) parametric equalizers, Low-Shelving EQ (6, 12 dB slope), LPN (Lowpass-Notch) switchable, Hi-Shelving EQ (6, 12 dB slope), Lo-Cut filter (6 or 12 dB slope), B6 alignment, Hi-Cut filter (6 or 12 dB slope), All-Pass filter (1st or 2nd order), Phase invert (180°)
Digital Compressor	4 (1 each output) with graph
Digital Limiter	4 (1 each output) with graph
Delay	3 master delays (2 ms - 900 ms)
	4 channel delays (0 ms - 900 ms)
Delay increment	21 µsec.
MIDI in/out/thru	Data dump, Master/Slave operation, Remote Control
Graphic LCD with LED-background light	122 x 32 dots
Locking function	via key-lock
Dimensions mm (WxHxD)	483.0 x 43.6 x 374.0 mm 1.72" x 19" x 14.75"
Weight net	5.0 kg (17.03 lbs.)

RACE Software

RACE

Software for Dx38

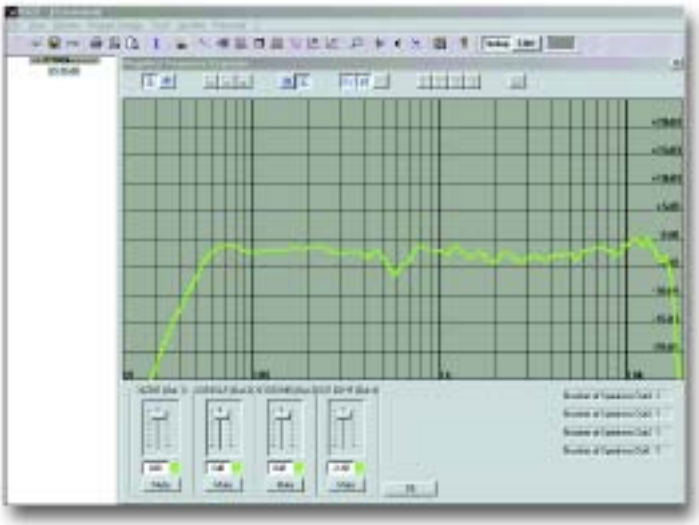
RACE is a professional audio tool to generate presets for speaker systems. In addition to the clear display of all used filters, delay and level settings, each output can be assigned with the acoustic data (phase and frequency response) of the individual speaker component.
This pure speaker data has been measured in free space. RACE then calculates the complex summation of all used filters, level and delay settings applied to these components. Thus the display on the screen is not only the electrical filter response but, for the first time, the actual true acoustic response of the component! Any change of parameter values is visible and audible in real time.

An additional tool is the SPL dispersion window for lower frequencies. Presets can even be prepared off-line in advance and need only a little tweaking once speakers are in place.
RACE enables engineers to seamlessly integrate room influence, speaker positioning and parameter settings and a RACE Processed Preset is a guarantee for a solid, accurate basis from which to begin system tuning. EV is supplying these presets for all current EV speaker systems, even if the needed combination is not part of the 50-factory preset of the Dx38.

Signal Flow Diagram

The signal flow diagram provides a clear overview of all available parameters. Immediately after the input metering there are five master equalizers per input available. Each of these filters can be set as hi- or lo-pass (6dB/12dB-Peaking), hi- or lo-shelf (6/12dB) or as a fully parametric eq. Each activated filter is signaled by a green LED symbol.

Each input, or the sum of both inputs, can be delayed separately up to 900ms with the master delay. The fully flexible routing allows each input as well as the sum to be routed to any of the four outputs. Four filters per output are available with same filter functions as the master eq. In addition, an all-pass filter for phase corrections can be selected. The x-over section provides a hi- and a lo-pass-filter per channel and an output delay for alignment. The dynamics sections with independent compressor and limiter can be used for speaker protection.
The output meter display works like the whole editor in real-time. Level control and mute are available for each channel. All of these parameters on the Dx38 can easily be edited via the front control panel without using a PC. Once you try RACE however, you may never want to work without it!

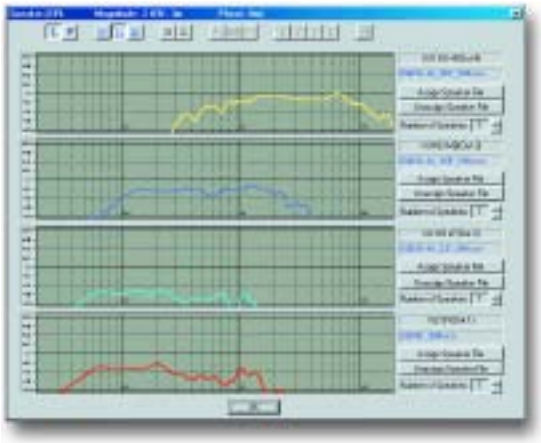


Overall Frequency Response

The acoustical response of Xi1183/64 plus Xi2181 (4-way) using the big Bode-Plot. Any change of parameters like level, filter or delays is displayed immediately. Even very complex array settings can be tuned simply and accurately.

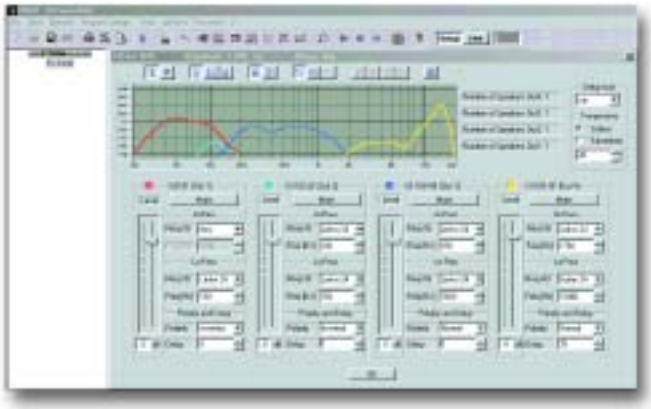
Download RACE software for the Dx38 for free from www.electro-voice.com

Real-Time Acoustic Cluster Editor



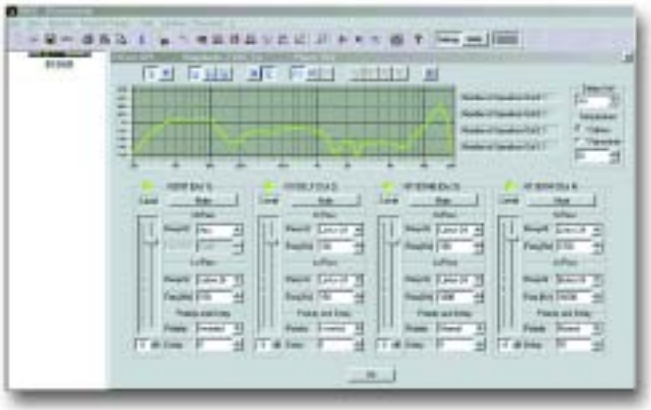
Speaker Assignment

In order to display the acoustical response of the complete system, the acoustical data of each speaker component (phase and magnitude) is assigned to the appropriate output. The data is measured in a free field. All influences of filter functions, levels and delay settings are then calculated. Thus RACE displays the acoustical response of a speaker system including all parameters used on the Dx38, but without any room influence – in realtime. This display is exclusive for EV speaker systems and helps to determine how to optimize the use of all digital parameter functions.



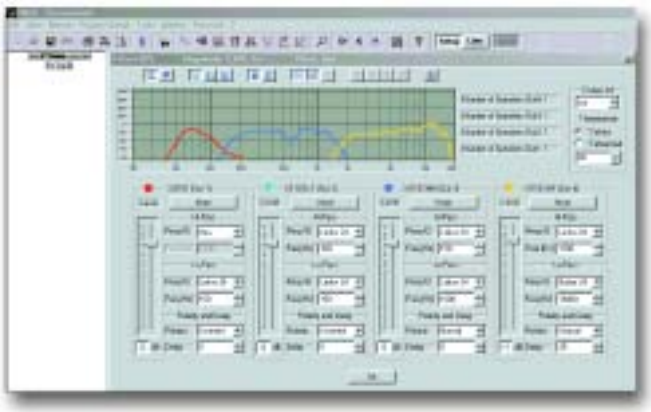
Filter Functions

Example for a 4-way set-up with Xi-1183 (3-way) plus Xi-2181 (Sub). Clearly displayed are the filter functions of each output including the master and channel eq settings. The resolution can be switched between ±12 dB, ±24 dB, or ±48 dB. It's also possible to change between frequency or phase response. Outputs of non-relevant speakers for this system can be removed from view. This example uses all four outputs. This preset is slightly complex as it uses, in addition to conventional x-overs, a wide overlap of Sub (Xi-2181) and Lo (Xi-1183LF).



Summation

The complex summation of all filters, levels and delays results in the viewed electrical transfer function of the Dx38. It's quite difficult to derive any idea of the sound quality from this graph.



Acoustical Response

However, adding the acoustical data of the raw components and amplifiers to this file, the display shows the real acoustical response caused by the actual parameter settings. Any change of a parameter is visible and audible immediately. The big advantage of this view is the independence of any room influence.
RACE is an industry first, and unique in that the software shows the true frequency response of EV components in realtime as they behave in a free field.

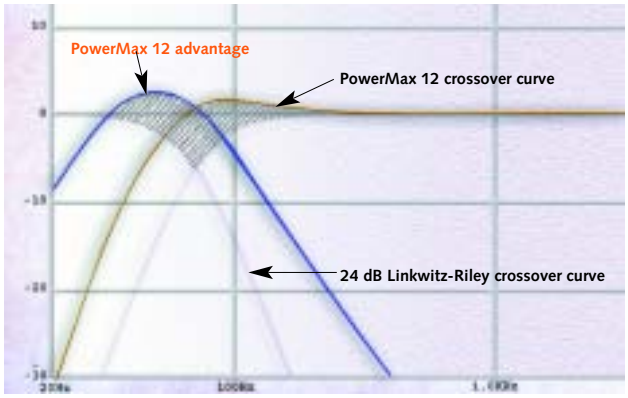
AC One Analog Controller

AC One Analog Audio Controller

The AC One analog audio controller has been designed to be used in high-performance applications that employ small- to medium-size full-range systems with subwoofers. Its excellent audio performance, dynamic range of 117 dB, extremely low noise level, and outstanding price-performance ratio make the AC One an advantageous alternative to conventional crossover and controller solutions. It is possible to meet the tough demands of modern audio applications – such as high sound pressure level, coverage, and sound quality – only by using a biamped loudspeaker system which can fully separate, amplify, and reproduce the audio signal´s frequency ranges. The PowerMax 12 crossover function brings the low-frequency performance of bigger systems to compact systems. The AC One guarantees highly economical system applications without loss of performance, and helps to save on application space.
Inputs and outputs are active balanced. The inputs can be fitted with optional high-quality input transformers (NRS 90208). The outputs feature output relays which protect against unwanted noise in case of power failure.

The PowerMax 12 Advantage and its Unique EQ Section

The new PowerMax 12 crossover function (patents pending) makes the best possible use of amplifier output power and loudspeaker transmission capacities. Compared to other regular crossover designs on the market, PowerMax 12 delivers an extra 3 dB SPL at the crossover point, something which cannot be achieved by normal EQ´ing alone. In addition, speaker overload and amplifier clipping are dramatically reduced. The PowerMax 12 crossover function silences the oft-heard complaint: "It needs more punch and definition." In addition, a 12-dB (Q: 1.0) lo-cut filter and a unique 3-band equalizer featuring the patented LPN filter allows for flexible, easy, and quick system adjustments.



AC One Options and Accessories:

Part number	Option/accessory
PA 1	Clear acrylic cover
NRS 90208	Input transformer

SPECIFICATIONS — AC One

Crossover type	2-way stereo + sub mono
Crossover frequency (sweepable)	45–160 Hz
Crossover filter type	PowerMax 12
Filter options (adjustable)	Lo-cut / 3-band EQ
Frequency response (-3 dB @ 1 kHz)	16 Hz–150 kHz
Nominal gain	0 dB
Maximum gain	+12 dB
Dynamic range (+20 dBu, a-weighted)	117 dB
THD + N (20 Hz–20 kHz, +6 dBu)	<0.02%
THD + N (typical, +6 dBu)	0.003%
Crosstalk attenuation	>80 dB
Mute switch rejection	>90 dB
Level control attenuation	>80 dB
Input impedance	20 kΩ

SPECIFICATIONS — AC One

Maximum level (Inputs: A, B)	+20 dBu
Rated level (inputs: A, B)	+6 dBu
Gain range (inputs: A, B)	-∞ to +6 dB
Output impedance (HI, LO, SUB)	75 Ω
Maximum level (outputs: HI, LO, SUB)	+20 dBu
Rated level (outputs: HI, LO, SUB)	+6 dBu
Gain range (outputs: HI, LO, SUB)	-∞ to +6 dB
Input/output connectors	XLR (active balanced)/ Inputs with parallel out
Power consumption	17 W
Power requirements 50-60 Hz (switchable)	100–120V/220–240V
Dimensions (H x W x D)	1.72" x 19" x 8.92" 43.6 x 483 x 226.5 mm (1 RU)
Net weight	7.07 lbs (3.2 kg)

Amplifiers

The Precision Series™ (P-Series), EV´s top line of power amplifiers, has become a world standard in touring business. Their extreme reliability, high-level sound and durable design make them the amp of choice for the Rolling Stones´ world concert tours. A two-year tour is torture for any piece of touring equipment and EV´s speakers and amplifiers did an outstanding job, not only from an acoustical point of view. During the two-year period, only one fuse blew on one of the amplifiers!

All EV amps are equipped with a unrivalled and complete protection and safety package for maximum sound performance. Their technical specifications represent the highest league of professional power amplifiers. Precision Series™ guarantees, among other things, outstanding transient response for uncomplicated sonic reproduction of the original signal, and extremely low dynamic distortion to ensure excellent sound quality. Q-Series and CPS-Series are based on Precision Series™.

All EV Amplifiers feature:

- Dynamic audio limiters (shown right)
- Switchable limiter time constant (P-Series)
- Peak current limiters
- Inrush current limiters
- Turn-on delay ("soft-start")
- Excessive high frequency (RF) protection
- Excessive Back-EMF protection
- DC fault protection
- Shorted loads protection
- High temperature protection controls thermal overload of the power transistors and the transformer
- Low-noise 3-stage resp. 4-stage fans with front-to-rear airflow
- Up to 30 % headroom of power capability
- Generous power-supply construction
- Flexible Input routing (mono parallel, stereo)
- Stable and safe operation on 2 ohms load
- Bridge-mode operation on 4 ohms load
- Highest quality standard: Made in Germany
- High-level sound performance
- Extreme reliability

Dynamic Headroom

30% Dynamic headroom of a Q66 amplifier

Q-Series

Q-Series is based on EV´s world famous P-Series. They contain all features listed above and guarantee the same high quality, in cost-effective packages of 2 x 450 W and 2 x 600 W output power.

Q-Series comes up in a stable 3-RU zinc-plated steel housing with rear-mounted dB-scaled level controls.

SPECIFICATIONS	Q 44	Q 66
Continuous rated power (1k Hz, THD 1 %)		
2 ohms	650 watts	850 watts
4 ohmsΩ	450 watts	600 watts
8 ohms	280 watts	380 watts
Continuous rated power (20 - 20k Hz, THD < 0,2%)		
4 ohms	350 watts	500 watts
8 ohms	230 watts	300 watts
Max. bridged output		
4 ohms	1,300 watts	1,700 watts
8 ohms	900 watts	1,200 watts
Slew rate	> 25 V / µs	> 30 V / µs
Total Harmonic Distortion	< 0.05 %	< 0.05 %
Intermodulation Distortion (SMPTE)	< 0.08 %	< 0.08 %
DIM 30	< 0.03 %	< 0.03 %
Damping factor 100 Hz / 1000 Hz	> 300 / > 200	> 300 / > 200
Crosstalk (at 1.000 Hz)	< 80 dB	< 80 dB
Signal-to-noise ratio (dB A-weighted)	> 105 dB	> 105 dB
Input Impedance (balanced)	20k Ω	20k Ω
Input Sensitivity (0 dBu factory setting)	0 dBu / +6 dBu	0 dBu / +6 dBu
Input connectors, parallel out	XLR in/out	XLR in/out
Output connectors	Speakon (Pin 1)	Speakon (Pin 1)
Dimensions (H x W x D)	133 x 483 x 386 mm 5.25" x 19"x 15.7"	133 x 483 x 386 mm 5.25" x 19" x 15.7"
Net weight	15 kg (35.2 lbs.)	16 kg (35.2 lbs.)

Precision Series™ Linear Amplifiers

The Precision Series™ (P-Series) is EV´s top line of linear power amplifiers. Their extreme reliability, high-level sound, and durability make them the professional's choice among rental companies and musicians.

For flown applications in the touring market, rear-rack mount kits are available to help stabilize the rack frame and ensure safe transportation.

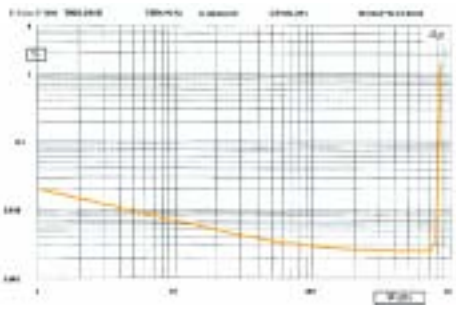
P 1200

- Compact, 2 RU chassis
- Switchable limiter constant (fast/slow)
- Switchable Lo- and Hi-cut filter
- Input transformer optional (NRS 90176)
- Selectable input sensitivity with 26 dB constant gain option (internal)

P 2000 / P 3000

- Dual power-supply
- Switchable limiter constant (fast/slow)
- Switchable Lo- and Hi-Cut filter
- Input transformer optional (NRS 90176)
- Selectable input sensitivity with 26 dB constant gain option (internal)

THD + N versus power output of a P 3000.



SPECIFICATIONS

	P1200	P 2000	P 3000
Continous rated power (1k Hz, THD 1 %)			
2 ohms	800 watts	1200 watts	1800 watts
4 ohms	550 watts	900 watts	1300 watts
8 ohms	370 watts	560 watts	850 watts
Continous rated power (20 - 20k Hz, THD < 0,1%)			
4 ohms	500 watts	800 watts	1200 watts
8 ohms	350 watts	500 watts	750 watts
Max. bridged output			
4 ohms	1600 watts	2400 watts	3600 watts
8 ohms	1100 watts	1800 watts	2600 watts
Slew rate	> 30 V / µs	> 35 V / µs	> 40 V / µs
Total Harmonic Distortion	< 0.05%	< 0.05%	< 0.05%
Intermodulation Distortion (SMPTE)	< 0.01%	< 0.01%	< 0.01%
DIM 30	< 0.01%	< 0.01%	< 0.01%
Damping factor 100 Hz / 1000 Hz	> 400 / > 300	> 400 / > 300	> 400 / > 300
Crosstalk (at 1.000 Hz)	< -70 dB	< -70 dB	< -70 dB
Signal-to-noise ratio (dB A-weighted)	> 105 dB	> 105 dB	> 105 dB
Input Impedance (20-20k Hz, balanced)	20k ohms	20k ohms	20k ohms
Input Sensitivity (0 dBu factory setting)	0 dBu / +6 dBu / +26 dB constant gain	0 dBu / +6 dBu / +26 dB constant gain	0 dBu / +6 dBu / +26 dB constant gain
Input connectors, parallel out	XLR in/out	XLR in/out	XLR in/out
Output connectors	Speakon (Pin 1)	Speakon (Pin 1)	Speakon (Pin 1)
Dimensions mm (H x W x D)	88 x 483 x 390 mm 3.5" x 18" x 16.8"	133 x 483 x 390 mm 5.2" x 19" x 16.8"	133 x 483 x 390 mm 5.2" x 19" x 16.8"
Net weight	17 kg (35.2 lbs.)	27 kg (57.3 lbs.)	29 kg (61.7 lbs.)

Precision Series Remote Amplifiers

Range of Amplifiers for High and Low Impedance Applications

P3000 RL

The flagship, with 2 x 1300 watts into 4 ohms and 2 x 1800 watts into 2 ohms: the digitally controlled version of the legendary P3000 amplifier. Speaker outputs on Speakon NL4 connectors.

P1200 RL

The universal, with 2 x 600 watts into 4 ohms and 2 x 850 watts into 2 Ohms. Speaker ouputs on barrier strip.

P1200 RT

High-impedance output for 100/70V-lines with 2 x 590 watts. The dynamic limiter circuit includes the output transformer and limits THD to 1% maximum. Speaker outputs on barrier strip.

P900 RL

Featuring 2 x 450 watts into 4 and 2 x 650 watts into 2 ohms the P900RL is dedicated for HF drive in multi-way systems. Speaker outputs on barrier strip.

P900 RT

High-impedance output for 100/70V-lines with 2 x 410 watts. Speaker output on barrier strip.

SPECIFICATIONS

	P900 RL			P1200 RL			P3000 RL			P900 RT		P1200 RT	
	8Ω	4Ω	2Ω	8Ω	4Ω	2Ω	8Ω	4Ω	2Ω	100V	70 V	100V	70 V
Continous Output Power (1 kHz, THD 1%)	280 W	450 W	650 W	380 W	600 W	850 W	850 W	1300 W	1800 W	410 W	400 W	590 W	580 W
Rated Output Power (20 Hz-20 kHz, THD <0,2%)	230 W	350 W	-	300 W	500 W	-	750 W	1200 W	-	350 W	350 W	500 W	500 W
Maximum Bridged Output (1 kHz, THD 1%)	900 W	1300 W	-	1200 w	1700 W	-	2600 W	3600 W	-	-	-	-	-
THD @ Rated Output Power	< 0.05%									<0.1%	<0.2%	<0.1%	<0.2%
DIM 30	<0.03%						<0.01%			<0.2%	<0.3%	<0.2%	<0.3%
Intermodulation (SMPTE)	<0.08%						<0.001%			<0.1%	<0.3%	<0.1%	<0.3%
Signal-to-Noise Ratio	> 105 dB									>100 dB			
Frequency Response (-1 dB)	20 Hz - 20 kHz									45 Hz - 20 kHz			
Dynamic Audio Limiter	THD </= 1% (Inputsignal </= + 20 dBu												
Protections	Hi-Temperature, DC, HF, Back EMF, Peak Current Limiter, Inrush Current Liminter, Power On Delay												
Cooling	3(4)-stage fan, front-to-rear cooling												
Input Sensivity and Impedance	1.55 V (+6dBu), 20 kOhm, XLR Input												
Maximum Input Level	8.7 V (+21 dBu)												
Serial Interface	Network: CAN, 2 RJ45 (CAT-5 Cabling), RS-232 for media control systems												
Control Logic In- and Outputs	2 x 0V 5V free configurable, Easy-Remote												
Loudspeaker Connectors	Barrier Strip						Speakon NL4			Barrier Strip			
Dimensions (Width x Height x Depth)	483 x 132.5 x 390 mm (52" x 19" x 15.4") (3 U)												
Net Weight	16 kg (35.3 lbs.)			17 kg (37.5 lbs.)			30 kg (66.2 lbs.)			24 kg (53 lbs.)		25 kg (55.1 lbs.)	

All measurements both channels driven into 8 ohms unless other specified.

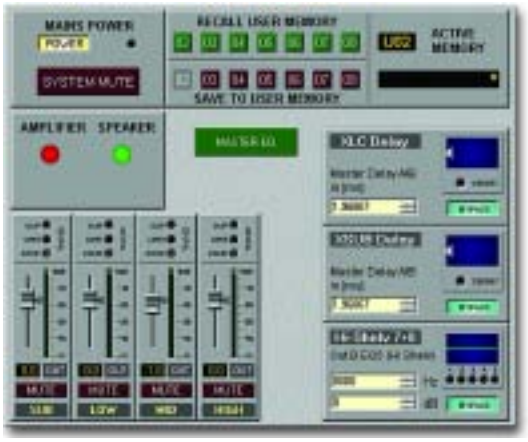
Precision Series Remote Amplifiers

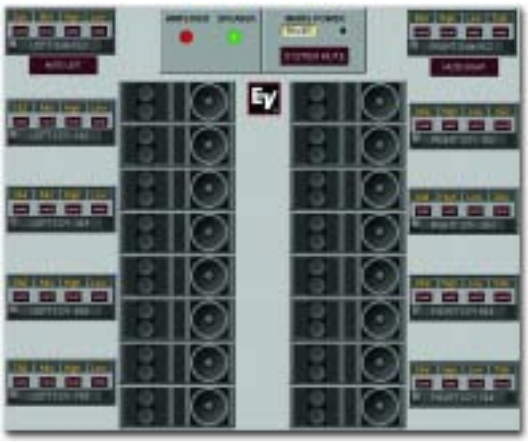
The new DSP-Controlled P-Series amplifiers combine legendary performance with uncompromised remote-control and system-supervision capability.

Using state-of-the-art technologies from our signal processor developments, we guarantee that our amplifiers will provide superior audio performance.

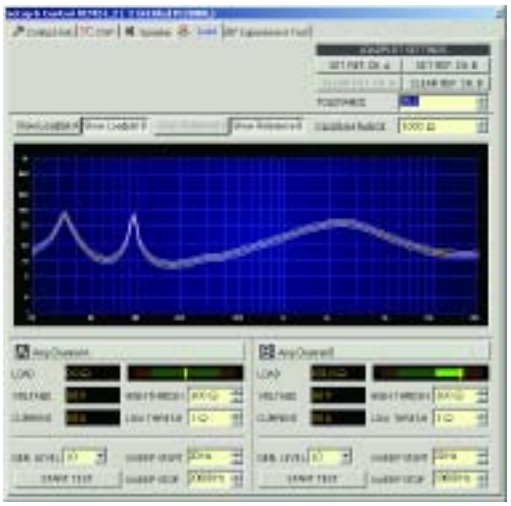
IRIS
Intelligent Remote
Integrated Supervision

- IRIS (**I**ntelligent **R**emote & **I**ntegrated **S**upervision) software for user-programmable, password-protectable control pages
- Remote control and supervision of up to 250 amplifiers over CAN network
- Built-in state-of-the-art digital signal processing (Filter, Crossover, Delay, Compressor,Limiter)
- Dynamic Range 115 dB
- RACE-processed presets for EV speakers available
- Realtime supervision of amplifier operation and loudspeaker load
- Automated system checks including full bandwidth measurement of connected loudspeakers
- Automated action procedures on critical operation modes are programmable





Typical user-accessable control pages



Unrivalled System Supervision

Impedance measurement of individual speaker component allows for comprehensive supervision of all speakers using system check function.

Compact Precision Amplifiers

- **Four models ranging from 2 x 600 W to 2 x 1600 W**
- **EV's legendary Precision Series sound**
- **30% dynamic headroom**
- **Class-H design for less heat dissipation**
- **Very light and compact format**
- **High-precision detent front controls**
- **Dynamic audio limiter**
- **Robust construction & reliable design**
- **Unique protection package including Back-EMF protection**

CP1200

With up to 2 x 600 watts into 2 Ohms and 2 x 400 watts into 4 Ohms dedicated for small fullrange cabinets and individual hi-frequency components in multiway systems. The CP1200 employs a conventional transformer power supply.

CP1800

Supplies up to 2 x 900 watts into 2 Ohms and 2 x 600 watts into 4 Ohms. Dedicated for smaller size full range speaker systems and hi-frequency components in multiway systems. The CP1800 uses a conventional transformer power supply.

CP2200

With up to 2 x 1100 watts into 2 Ohms and 2 x 800 watts into 4 Ohms, the CP2200 is not only a perfect complement to many fullrange speaker cabinets, but also mid- and hi-frequency components in larger concert-sound systems. The CP2200 employs a conventional transformer power supply.

CP3000 S

The flagship of the Precision Series Compact amplifiers is not only the first Precision Series amplifier to use a switch-mode power supply, but also the first switch-mode amplifier with EV's Precision Series sound. With up to 2 x 1600 watts into 2 Ohms and 2 x 1100 watts into 4 Ohms, it is not only the most powerful in the line, but also the lightest model at only 17.96 lbs (8.15 kg).
The CP3000S is state-of-the-art for all applications. It's specifically designed to allow for long-term driving of low loads with subwoofers without stress. Its reliability coupled with its pleasing, rich sound makes it the first choice for all mid- and hi- speaker cabinets.

SPECIFICATIONS

	CP3000S	CP2200	CP1800	CP1200
Maximum power (1k Hz; THD <1%)				
2 ohms	1600 W	1100 W	900 W	600 W
4 ohms	1100 W	800 W	600 W	400 W
8 ohms	600 W	500 W	350 W	240 W
Rated power (20 Hz–20 kHz; THD <0.2%)				
4 ohms	900 W	700 W	500 W	300 W
8 ohms	450 W	350 W	250 W	150 W
Maximum bridged output (1,000 Hz; <1% THD)				
4 ohms	3200 W	2200 W	1800 W	1200 W
8 ohms	2200 W	1600 W	1200 W	800 W
Slew rate	35 V/µs	35 V/µs	30 V/µs	25 V/µs
Total harmonic distortion	<0.05%	<0.05%	<0.05%	<0.05%
Intermodulation distortion (SMPTE)	<0.02%	<0.02%	<0.02%	<0.02%
Crosstalk (at 1,000 Hz)	<-80 dB	<-80 dB	<-80 dB	<-80 dB
Input impedance (balanced)	20 kΩ	20 kΩ	20 kΩ	20 kΩ
Signal-to-noise ratio (dB A-weighted)	107 dB	107 dB	105,5 dB	103,5 dB
Dimensions (W x H x D)	483 x 88.1 x 368.8 mm 19" x 3.5" x 15.22"	483 x 88.1 x 368.8 mm 19" x 3.5" x 15.22"	483 x 88.1 x 368.8 mm 19" x 3.5" x 15.22"	483 x 88.1 x 368.8 mm 19" x 3.5" x 15.22"
Net weight	8.15 kg (17.96 lbs.)	16 kg (35.2 lbs.)	15 kg (33 lbs.)	13.5 kg (30.8 lbs.)

Contractor Precision Series (CPS) Amplifiers

The CPS Series are high-performance amplifiers with unmatched dynamic range capability, ensuring the most reliable operation favored by sound contractors in all sound reinforcement applications.
The CPS Series achieves its outstanding dynamic range through the use of our unique nonlinear signal monitor. This feature limits amplifier distortion to less than 1 percent, eliminating the "hard-edged" clipping which can destroy most speaker systems. The amplifier's power supply is specifically designed to deliver high peak signals, proving a burst signal output capability headroom more than 30% over their average continuous rating.

CPS2T

The CPS2T offers all the performance of the CPS2 and adds the capability of 70v/100v constant voltage operation. It also features Transformer Saturation Protection (TSP), which monitors the current demands of the 70v/100v matching transformer and can protect against overload and distortion. The exceptional reliability and performance of the CPS2T has made it the amplifier of choice for a wide variety of distributed audio installations such as convention centers, factories, warehouses, stadiums, office buildings, and the like. Anywhere large amounts of reliable 70v amplifier power is needed, the CPS2T can meet the spec easily.

CPS 1 (not shown)

The CPS1 can deliver up to 450 watts of power at 1kHz into 4 ohms. The CPS 1 has been extremely popular in smaller venues such as houses of worship, retail spaces, and entertainment venues where background or foreground music is needed.

CPS 2 (not shown)

The CPS2 incorporates all the advanced features of the CPS1 but can deliver up to 600 watts of power at 1kHz into 4 ohms.

CPS 2.4

The CPS2.4 is ideal for smaller full-range systems or larger mid/high frequency amplification in larger installations. The CPS2.4 is an ideal companion to the popular EVID line of premium surface-mount and ceiling speaker systems.

CPS 2.6

The workhorse of the line. Its 600 watts of compact power is perfect for mid-level full range installs.

CPS 2.8

At 800 watts per channel the CPS2.8 is the best value in the line. It can power a wide range of speaker cabinets either in multi-way or full-range modes for a large range of fixed installation jobs.

CPS 2.11

No power amplifier on the market can offer such a high level of power performance and reliability. At 1100 watts/channel the CPS2.11 can power large stadium, theater, and auditorium type installations with ease.

SPECIFICATIONS

	CPS1	CPS2	CPS2.4	CPS2.6	CPS2.8	CPS2.11	CPS2T
Maximum power (1k Hz; THD <1%)							
2 Ω	650 W	850 W	600 W	900 W	1,100 W	1,600 W	850 W
4 Ω	450 W	600 W	400 W	600 W	800 W	1,100 W	600 W (100V: 500W)
8 Ω	280 W	350 W	240 W	350 W	500 W	600 W	380 W
Rated power (20 Hz–20 kHz; THD <0.2%)							
4 Ω	350 W	500 W	300 W	500 W	700 W	900W	500 W (100V: 580W)
8 Ω	230 W	300 W	150 W	250 W	350 W	450 W	330 W
Maximum bridged output (1,000 Hz; <1% THD)							
4 Ω	1,300 W	1,700 W	1,240 W	1,800 W	2,200 W	3,200 W	1,700 W
8 Ω	900 W	1,200 W	800 W	1,200 W	1,600 W	2,200 W	1,200 W (100V: 1,160)
Slew rate	25 V/µs	30 V/µs	35 V/µs	35 V/µs	35 V/µs	35 V/µs	30 V/µs
Total harmonic distortion	<0.05%	<0.05%	<0.05%	<0.05%	<0.05%	<0.05%	<0.05% (100V: <0.2%)
Intermodulation distortion (SMPTE)	<0.08%	<0.08%	<0.02%	<0.02%	<0.02%	<0.02%	<0.08% (100V: <0.3%)
Crosstalk (at 1,000 Hz)	<-80 dB	<-80 dB	<-80 dB	<-80 dB	<-80 dB	<-80 dB	<-80 dB
Input impedance (balanced)	20 kΩ	20 kΩ	20 kΩ	20 kΩ	20 kΩ	20 kΩ	20 kΩ
Signal-to-noise ratio (dB A-weighted)	>105 dB	>105 dB	103,5 dB	105.5 dB	107 dB	107 dB	>100 dB
Dimensions (W x H x D)	483 x 132.5 x 368.8 mm 19" x 5.22" x 15.22"	483 x 132.5 x 368.8 mm 19" x 5.22" x 15.22"	483 x 88.1 x 368.8 mm 19" x 3.5" x 15.22"	483 x 88.1 x 368.8 mm 19" x 3.5" x 15.22"	483 x 88.1 x 368.8 mm 19" x 3.5" x 15.22"	483 x 88.1 x 368.8 mm 19" x 3.5" x 15.22"	483 x 132.5 x 368.8 mm 19" x 5.22" x 15.22"
Net weight	15 kg (33.1 lbs.)	16 kg (35.3 lbs.)	13.5 kg (30.8 lbs.)	15 kg (33 lbs.)	16 kg (35.2 lbs)	8.15 kg (17.96 lbs.)	22.5 kg (49.6 lbs.)

Precision Series™ Modular Amplifiers

Modular P-Series amplifiers guarantee the same quality and performance standards as linear P-Series amplifiers but are designed for dedicated EV systems such as the QRx Series. They combine highest-quality signal control, maximum speaker-operation safety, and the extreme reliability of linear P-Series amps within a modular controlled amplifier concept.

This all adds up to maximum flexibilty and an economic alternative to digitally controlled amp racks. Rear-rackmount kits are available in a 15.5-inch version (NRS 90235) or 18-inch version (NRS 90223) to help stabilize the rack frame and ensure safe transportation.

P 1202

- Dual channel
- Modular controller amp concept
- Input transformer optional (NRS 90208)
- Without controller cards, useable as linear amp with fixed +6 dBu input sensitivity

P 1201

- Single channel
- Modular controller amp concept
- Input transformer optional (NRS 90208)
- Without controller cards, useable as linear amp with fixed +6 dBu input sensitivity

SPECIFICATIONS	P 1201	P 1202
Continous rated power (1k Hz, THD 1 %)		
2 ohms	1600 watts	850 watts
4 ohms	1200 watts	600 watts
8 ohms	750 watts	380 watts
Continous rated power (20 - 20k Hz, THD < 0,2%)		
4 ohms	1000 watts	500 watts
8 ohms	500 watts	300 watts
Max. bridged output		
4 ohms	N/A	1700 watts
8 ohms	(single channel!)	1200 watts
Slew rate	> 40 V / µs	> 30 V / µs
Total Harmonic Distortion	< 00.5%	< 0.05%
Intermodulation Distortion (SMPTE)	< 0.08.%	< 0.08%
DIM 30	< 0.03%	< 0.03%
Damping factor 100 Hz / 1000 Hz	> 300 / > 200	> 300 / > 200
Crosstalk (at 1 kHz)	---	---
Signal-to-noise ratio (dB A-weighted)	> 106 dB	> 106 dB
Input Impedance (20-20k Hz, balanced)	20 kohms	20 kohms
Input Sensitivity (without module)	6 dBu fix	6 dBu fix
Input connectors, parallel out	XLR in/out	XLR in/out
Output connectors	Speakon (Pin 1)	Speakon (Pin 1)
Dimensions mm (H x W x D)	133 x 483 x 390 mm 5.2" x 19" x 16.8"	133 x 483 x 390 mm 5.2" x 19" x 16.8"
Net weight (without modules)	17 kg (37.5 lbs.)	17 kg (37.5 lbs.)

P1202/P1201 Control Modules

These controller cards provide customized system equalization, crossover design, and EV's unique voice-coil protection circuit (VCP) for use with EV loudspeakers (modules for QRx speakers are currently available). Cards for full-range systems feature a switchable 3,000 Hz (Q = 1, -3 dB) DIP-EQ and a flush-mounted operation mode switch. Each module also includes a "1-in-2" switch on the PCB board, allowing it to drive both channels of a P1202 independently while using only one controller card. Note that when a module is used, the amplifier's input sensitivity changes to 0 dBu.

SPECIFICATIONS	M-112	M-115	M-212	M-LMH
Dedicated for	Rx-112/75	Rx-115/75	Rx-212/75	12/15-2
Operation function	Full-range / Mid-High	Full-range / Mid-High	Full-range / Mid-High	Full-range / Mid-High
Frequency Response (-6 dB) Full-range mode	27 - 50k Hz	25 - 50k Hz	27 - 50k Hz	27 - 50k Hz
Frequency Response (-6 dB) Mid-High mode	75 - 50k Hz	75 - 50k Hz	75 - 50k Hz	75 - 50k Hz
Adjustable gain-range	- 85 dB to + 6 dB	- 85 dB to + 6 dB	- 85 dB to + 6 dB	- 85 dB to + 6 dB
S/N Ratio	< 105 dB	< 105 dB	< 105 dB	< 105 dB
THD + N	< 0.05%	< 0.05%	< 0.05%	< 0.05%

	M-118S	M-215S	M-218S	M-SUB
Dedicated for	Rx-118S	Rx-215S	Rx-218S	18"
Operation function	Subwoofer	Subwoofer	Subwoofer	Subwoofer
Frequency Response (-6 dB) Full-range mode	25 - 90k Hz	25 - 90k Hz	25 - 90k Hz	25 - 90k Hz
Frequency Response (-6 dB) Mid-High mode	---	---	---	---
Adjustable gain-range	- 85 dB to + 6 dB	- 85 dB to + 6 dB	- 85 dB to + 6 dB	- 85 dB to + 6 dB
S/N Ratio	< 108 dB	< 108 dB	< 108 dB	< 108 dB
THD + N	< 0.05%	< 0.05%	< 0.05%	< 0.05%

Wired Microphones

Cobalt™ Series

SPECIFICATIONS

	Co4	Co5	Co7	Co9	Co11
Element	Dynamic	Dynamic	Dynamic	Dynamic	Self-biased condenser
Polar pattern	Cardioid	Cardioid	Cardioid	Cardioid	Cardioid
Impedance, Low-Z balanced	600 ohms	600 ohms	600 ohms	600 ohms	Low-Z'balanced (250 Ohms)
Frequency Response (-3 dB)	50 - 18,000 Hz	50 - 18,000 Hz	50 - 18,000 Hz	50 - 18,000 Hz	50 - 20,000 Hz
Open Circuit Voltage (at 1,000 Hz)	2.2 mV/Pascal	2.8 mV/Pascal	3.2 mV/Pascal	3.2 mV/Pascal	4 mV/Pascal
Magnetic Circuit	N/DYM®	N/DYM®	N/DYM®	N/DYM®	N/A
Power requirement (Phantom power)	N/A	N/A	N/A	N/A	24 to 48 Vdc
Specials	—	Low-noise On/off-Switch	—	—	—
Case Material	Die-cast zinc	Die-cast zinc	Die-cast zinc	Die-cast zinc	Die-cast zinc
Finish	cobalt	cobalt	cobalt	cobalt	cobalt
Included accessories	Stand adapter, zippered vinyl carrying pouch hard-shell case	Stand adapter, zippered vinyl carrying pouch hard-shell case	Stand adapter, zippered vinyl carrying pouch hard-shell case	Stand adapter, zippered vinyl carrying pouch hard-shell case	Stand adapter (black) gig bag
Optional accessories	—	—	—	—	
Connector type	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR
Dimension (Length x max. Diameter)	148 x 23 mm (5.8" x 0.9")	170 x 53 mm (6.7" x 2.1")	170 x 53 mm (6.7" x 2.1")	170 x 53 mm (6.7" x 2.1")	173 x 53 mm (6.7" x 2.1")
Weight net	340 g (0.75 lbs.)	306 g (0.67lbs.)	332 g (0.73 lbs.)	335 g (0.74 lbs.)	292 g (0.64 lbs)

Live Interview Mics

EV's 635 and RE50 microphones are famous in broadcast, television, and radio OBs (outside broadcasts). These microphones set world standards especially for ENG (electronic news production) and EFP (electronic field production). They are extremely rugged, can withstand high humidity, temperature extremes and corrosive effects such as salt-air yet provide excellent sound performance.

SPECIFICATIONS

	635A(B)	635N/D-B	RE50/B	RE50N/D-B
Element	Dynamic	Dynamic	Dynamic	Dynamic
Polar pattern	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional
Impedance, Low-Z balanced	150 ohms	150 ohms	150 ohms	150 ohms
Frequency Response (-3 dB)	80 - 13,000 Hz	80 - 13,000 Hz	80 - 13,000 Hz	80 - 13,000 Hz
Power Level (0dB = 1 mW/Pascal) at 1,000 Hz	- 55 dB	- 51 dB	- 55 dB	- 51 dB
Open Circuit Voltage (at 1,000 Hz)	—	2.0 mV/Pascal	—	2.0 mV/Pascal
Magnetic Circuit	Alnico	N/DYM®	Alnico	N/DYM®
Specials	—	Acoustalloy®	Dyna-Damp	Dyna-Damp™ Memraflex
Filters	—	—	—	—
Case Material	Steel	Steel	Aluminum	Aluminum
Finish	Fawn beige (A) Semi-gloss black (A/B)	Semi-gloss camera black	Semi-gloss camera black	Semi-gloss camera black
Included accessories	Stand adapter	Stand adapter	Stand adapter zippered vinyl carrying pouch hard-shell case	Stand adapter zippered vinyl carrying pouch hard-shell case
Connector type	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR
Dimension (Length x max. Diameter)	151 x 36 mm 5.94" x 1.41"	148 x 36 mm 5.83" x 1.41"	197 x 49 mm 7.76" x 1.92"	197 x 49 mm 7.76" x 1.92"
Weight net	170 g (0.37 lbs.)	170 g (0.37 lbs.)	269 g (0.59 lbs.)	269 g (0.59 lbs.)

RE50/B, RE50 N/D-B

(N/DYM® version)

- N/DYM® for greater output (RE50 N/D)
- No muddy lows when used near lips
- Dyna-Damp™ for extremely effective handling noise isolation
- On-camera use with 422 A desk stand
- Acoustalloy® diaphragm material for very smooth response over a wide frequency range
- Withstands high humidity; temperature extremes, corrosive salt air
- Integrated four-stage pop-filter
- Integral windscreen and blast filter
- Comes with accessories

635A (beige)
635A/B (black)

- Linear frequency response
- Completely pop-free performance
- Four-stage pop and dust filter
- Internal effective shock absorber
- Comes with accessories

635N/D-B

- Uniform 80 - 13,000 Hz frequency response
- N/DYM® magnetic for greater output
- Acoustalloy® diaphragm material for very smooth response over a wide frequency range
- Integral windscreen and blast filter
- Comes with accessories

Wired Microphones

N/DYM® Series

N/DYM® Series is different to other microphones. Excellent and clear sound, comfortable and safe handling, N/DYM® magnetic structure, EV's unique VOB™ technology and studio sound performance mark EV´s N/DYM® Series.

As part of a fixed installation, in studios, or on the road, EV N/DYM® microphones outperform any other microphone in their class.

N/D267 a/as

- Vocal and speech microphone
- Entry into the world of high-performance mics
- Includes accessories
- On/off-Switch (as version)

N/D367 s

- Dedicated for female voices
- On/off-switch (as version)
- Includes accessories

N/D478

- Universal microphone
- Ideal to mic drums, percussion or guitars, also as vocal "spare" mic
- Smooth response
- Includes accessories

N/D967

- Concert sound vocal mic
- Highest gain before feedback
- Ultra-low handling noise
- Includes accessories

N/D468

- Instrument microphone
- Unique "moving head"
- Extreme low self-noise
- Accurate response, even in high SPLs
- Includes accessories

N/D767 a

- Top-class vocal microphone
- Multi-stage shock mount for unmatched low-handling noise
- Condenser mic performance
- Includes accessories

N/D868

- Designed specifically for kickdrums
- RE20 capsule type
- Extended "lows" to tighten mixes
- Frequency response typically eliminating the need of an EQ
- Extremely low self-noise
- Includes accessories

SPECIFICATIONS

	N/D267 a/as	N/D367 s	N/D468	N/D478	N/D767 a	N/D868	N/D967
Element	Dynamic	Dynamic	Dynamic	Dynamic	Dynamic	Dynamic	Dynamic
Polar pattern	Cardioid	Cardioid	Supercardioid	Cardioid	Supercardioid	Cardioid variant	Supercardioid
Impedance, Low-Z balanced	300 ohms	300 ohms	150 ohms	300 ohms	300 ohms	150 ohms	
Frequency Response (-3 dB), close response	45 - 15,000 Hz	25 - 20,000 Hz	30 - 22,000 Hz	45 - 15,000 Hz	35 - 22,000 Hz	20 - 10,000 Hz	50 - 13,000 Hz
Frequency Response (-3 dB), far response	100 - 15,000 Hz	55 - 20,000 Hz	60 - 22,000 Hz	100 - 15,000 Hz	70 - 22,000 Hz	—	120 - 13,000 Hz
Output Level(0dB = 1 m W/Pascal) at 1,000 Hz	- 52 dB	- 53 dB	- 51 dB	- 52 dB	- 51 dB	- 52 dB	- 52 dB
Open Circuit Voltage (at 1,000 Hz)	2.9 mV/Pascal	2.2 mV/Pascal	3.1 mV/Pascal	2.9 mV/Pascal	3.1 mV/Pascal	1.0 mV/Pascal	4.0 mV/Pascal
Equivalent Noise (0 dB=20 micropascal) A-weighted	—	< 17 dB SPL	< 14 dB SPL	—	—	< 17 dB SPL	< 16 dB SPL
Magnetic Circuit	N/DYM®	N/DYM®	N/DYM®	N/DYM®	N/DYM®	N/DYM®	N/DYM®
Case Material	Metal	Metal	Metal	Metal	Metal	Metal	Metal
Finish	Nonreflecting black	Nonreflecting black	Nonreflecting black	Nonreflecting black	Nonreflecting black	Nonreflecting black	Nonreflecting black
Included accessories	Stand adapter, soft zippered carrying pouch	Stand adapter, soft zippered carrying pouch	Stand adapter, soft zippered carrying pouch	Stand adapter, soft zippered carrying pouch	Stand adapter, soft zippered carrying pouch	Stand adapter, soft zippered carrying pouch	Stand adapter, soft zippered carrying pouch
Connector type	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR
Dimension (Length x max. Diameter)	181 x 52 mm 7.13" x 2.05	181 x 52 mm 7.13" x 2.05	115 x 52 mm 4.53" x 2.05"	181 x 52 mm 7.13" x 2.05"	181 x 52 mm 7.13" x 2.05	133 x 60 mm 5.24" x 2.36"	173 x 52 mm 6.81" x 2.05"
Weight net	238 g (0.52 lbs.)	200 g (0.44 lbs.)	190 g (0.42 lbs)	247 g (0.54 lbs.)	260 g (0.57 lbs.)	295 g (0.65 lbs.)	205 g (0.45 lbs.)

Wired Microphones

RE-Series

RE Series is the first choice of microphones for smooth and accurate reproduction. Its unique and famous sound performance makes it a favorite in the broadcast, studio and touring business. EV's Variable-D® design used in the RE20 and RE27 N/D broadcast studio products was developed to ensure true and accurate response across all frequencies without the up-close boominess associated with proximity effect. As a result, these microphones have become the industry standard for radio studios worldwide.

RE20

- Variable-D® for minimal proximity effect
- True cardioid with no coloration at 180° off-axis
- Ultra-flat frequency response
- Studio condenser response
- Large diaphragm
- Hum-bucking coil
- Integral wind and blast filter
- Switchable EQ (-4.5 dB, 400-100 Hz)
- Comes with accessories

RE510

- Professional self-biased condenser vocal microphone
- Selectable low-end roll-off
- Supercardioid pattern
- Excellent off-axis rejection
- Wide dynamic range

RE27 N/D

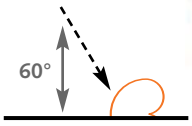
- Variable-D® for minimal proximity effect
- N/DYM magnetic circuit brings 6 dB more sensitivity
- Ultra-flat frequency response
- Studio condenser performance
- Large diaphragm
- 3 selectable filters: -6 dB, 250-100 Hz / gentle roll-off 12 dB, 1000-100 Hz and a -3 dB high frequency roll-off
- Integral wind and blast filter
- Comes with accessories

RE90 B (Black)
RE90 BW (White)

- Boundary layer
- Ultra-thin profile (16 mm) housing with rubber nonslip bottom pad and strong steel screen
- Internal terminal block for disconnecting cable to insert thru holes
- Integrated pop filter
- Ideal working angle 60° off-axis
- Comes with accessories

RE200

- High-end transducer based on world standard studio microphone RE2000
- Very low self-noise
- AcoustiDYM™ shock-mount system
- Ultralow-mass, gold-laminated diaphragma
- Transformerless output device
- Rear response 15 dB below the front axis at 1,000 Hz
- Comes with accessories



SPECIFICATIONS

	RE20	RE27	RE510	RE200	RE90 B
Element	Dynamic	Dynamic	Condenser (self-biased)	True condenser	Back electret condenser
Polar pattern	Cardioid	Cardioid	Supercardioid	Cardioid	(Half-) Cardioid
Impedance, Low-Z balanced	150 ohms	150 ohms	150 ohms	200 ohms	200 ohms
Frequency Response (-3 dB)	45 - 18,000 Hz	45 - 20,000 Hz	50 - 20,000 Hz	50 - 18,000 Hz	80 - 15,000 Hz
Power Level (0dB = 1 m W/Pascal) at 1.000 Hz	- 57 dB	- 51 dB	-41 dB	- 39 dB	- 33 dB
Open Circuit Voltage (at 1,000 Hz)	1.5 mV/Pascal	3.1 mV/Pascal	5.6 mV/Pascal	10 mV/Pascal	25 mV/Pascal
Equivalent Noise (0 dB=20 micropascal)	—	—	18 dB SPL	21 dB SPL	< 25 dB SPL
Maximum SPL (1% distortion, 1,000 Hz)	—	—	140 dB SPL	130 dB	127 dB
Power requirement (Phantom power)	N/A	N/A	12 - 52 VDC	12 - 52 VDC	9 - 52 VDC
Current Consumption	N/A	N/A	N/A	3.5 mA	2.5 mA
Magnetic Circuit	—	N/DYM®	N/A	N/A	N/A
Specials	Variable-D®	Variable-D®	transformerless output device	AcousticDYM, transformerless output device	transformerless output device
Filters	Tilt-down EQ	3 selectable EQs	switchable low-freq roll-off	—	—
Case Material	Steel	Steel	Metal	Metal	Heavy-duty zinc diecast
Finish	Fawn beige	Satin nickel	Warm-Grip black handle	Semi-gloss camera black	Nonreflecting black or white
Included accessories	Stand adapter, zippered vinyl carrying pouch, hard-shell case	Stand adapter, zippered vinyl carrying pouch, hard-shell case	Stand adapter, zippered vinyl carrying pouch	Stand adapter, windscreen	180 cm thin and
Connector type	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR
Dimension (Length x max. Diameter)	217 x 54 mm 8.54" x 2.13"	217 x 54 mm 8.54" x 2.13"	180 x 50 mm 7.09" x 1.97"	137 x 28 mm 5.39" x 1.10"	128 L x 94 W x 16 H mm 5.04" x 3.70" x 6.30"
Weight net	737 g (1.62 lbs.)	709 g (1.56 lbs.)	215 g (0.47lbs.)	185 g (0.41 lbs.)	358 g (0.79 lbs.)

Wired Microphones

The RE90 series brings the famous sound performance of EV´s legendary RE series to fixed installations. EV´s RE90 microphones are the most natural-sounding microphones on the market for public speaking, etc. and as a matter of course for professional theatrical productions. Ergonomically and architecturally designed, EV has married functionality with aesthetics making RE series the traditional favorite among sound contractors, architects and sound engineers. RE90 microphones are designed for the highest-quality applications with linear frequency response and excellent, high gain-before-feedback. All microphones guarantee a uniform polar pattern across the range, high sensitivity, low self-noise and provide a transformerless output device. The high-quality pre-amps are highly-resistant to electrical noise and radio frequency interference (RFI). RE90 L and RE90 H have a external pre-amp housing into the XLR connector. Gooseneck microphones have an all-metal construction to substantially reduce noise from stray magnetic fields and RFI.

RE90 H (Black)
RE90 HW (White)

- Hanging microphone
- External Pre-amp
- Very uniform polar pattern
- Includes an installation guide
- Comes with accessories

RE90 L

- Lavalier microphone
- Sub-miniature capsule design
- Capsule provides superior EMI/RFI shielding
- Very light-weight yet extremely reliable
- External pre-amp with very low current consumption
- Comes with accessories

Actual size

RE90 P-12 (281mm)
RE90 P-18 (443mm)

- Gooseneck podium microphone
- Also perfect for instruments on-stage, such as acoustic guitar or choir
- Uniform frequency response and polar pattern
- Strutted (yet flexible) ultra-thin gooseneck
- Integrated two-stage pop-filter
- Comes with accessories

RE92 H (Black)
RE92 HW (White)

- Hanging microphone
- External Pre-amp
- Very uniform polar pattern
- Includes an installation guide
- Comes with accessories

RE92 L

- Premium quality lavalier cardioid microphone
- Sub-miniature capsule design
- Capsule provides superior EMI/RFI shielding
- Very light-weight yet extremely reliable
- External pre-amp with very low current consumption
- Comes with accessories

SPECIFICATIONS

	RE90 H	RE90 L	RE90 P	RE92 H	RE92 L
Element	Back electret condenser	Back electret condenser	Back electret condenser	Back electret condenser	Back electret condenser
Polar pattern	Cardioid	Omnidirectional	Cardioid	Cardioid	Cardioid
Impedance, Low-Z balanced	200 ohms	100 ohms	200 ohms	250 ohms	250 ohms
Frequency Response (-3 dB)	75 - 15,000 Hz	50 - 18,000 Hz	70 - 15,000 Hz	40 - 20,000 Hz	40 - 20,000 Hz
Power Level (0dB=1 m W/Pascal) at 1,000 Hz	- 30 dB	- 34 dB	- 43 dB		
Open Circuit Voltage (at 1,000 Hz)	27 mV/Pascal	12.6 mV/Pascal	4.5 mV/Pascal	5,6mV	5,6mV
Equivalent Noise (0 dB=20 micropascal) A-weighted	< 25 dB SPL	< 29 dB SPL	< 28 dB SPL	< 30 dB SPL (A-weighted)	< 30 dB SPL (A-weighted)
Maximum SPL (1% distortion, 1,000 Hz)	120 dB	130 dB	130 dB	>135 dB	>135 dB
Power requirement (Phantom power)	9 - 52 VDC	9 - 52 VDC	9 - 52 VDC	24 to 52 Volt Phantom Power	24 to 52 Volt Phantom Power
Current Consumption	2.0 mA	1.0 mA	2.5 mA	6 mA	6 mA
Specials	external pre-amp	external pre-amp	transformerless output device	external preamp	external preamp
Case Material	Steel	Polycarbonate resin	Steel		
Finish	Low-gloss black or white	Nonreflecting black	Nonreflecting black	nonreflective black or white	nonreflective black or white
Included accessories	760 cm braided cable	Gig bag	Windscreen, double-sided flexible cable	mounting hardware tape	mounting hardware
Connector type	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR	3-pin XLR
Dimension (length x diameter)	37 x 13 mm 1.46" x 0.51"	6 x 5 mm 0.24" x 0.20"	**P-12**: 281 x 6.4 mm **P-18**: 443 x 6.4 mm **P-12**: 11.06" x 0.25" **P-18**: 17.44" x 0.25" (gooseneck)	32.1 x 10.5mm 1.26" x 0.41" (mic only)	24.1 x 10.5mm 0.95" x 0.41"
Weight net	157 g (0.35 lbs.)	34 g (0.07 lbs)	**P-12**: 400 g (0.88 lbs.) **P-18**: 528 g (1.16 lbs.)	240 g (0.53lbs.) total	160 g (0.35 lbs.) total

PolarChoice™

The intelligent choice among gooseneck mics

All PolarChoice microphones feature dual capsule design for user-selectable polar pattern: omnidirectional, cardioid, supercardioid and hypercardioid - all in one mic!

Optimized for speech pickup, these condenser microphones combine excellent clarity with outstanding feedback rejection and speech intelligibility.

Five basic versions are available :

XLR

- 3-pin XLR, available with 12" & 18" gooseneck

PLUS

- Shipped with both XLR and flange mount accessory plus configurable ON/OFF switch, 5", 12" & 18" gooseneck versions

FL

- Flange mounting, available with 12" & 18" gooseneck

Satellite

- Integrated deskstand and configurable switch for use with plug-in EV wireless beltpacks, 5", 12" & 18" gooseneck versions

Desktop

- Integrated deskstand and configurable switch, for use with standard XLR cables 5", 12" & 18" gooseneck versions

SPECIFICATIONS

	PolarChoice™
Element	Back electret condenser
Polar pattern	Omni, Super-, Hyper, Cardioid
Impedance, Low-Z balanced	200 ohms
Frequency Response (-3 dB)	75 - 15,000 Hz
Power Level (0dB=1 m W/Pascal) at 1,000 Hz	- 44 dB
Open Circuit Voltage (at 1,000 Hz)	5.6 mV/Pascal
Equivalent Noise (0 dB=20 micropascal) A-weighted	< 28 dB SPL
Maximum SPL (1% distortion, 1,000 Hz)	130 dB
Power requirement (Phantom power)	9 - 52 VDC
Current Consumption	2.8 mA
Specials	transformerless output device
Case Material	Steel
Finish	Nonreflecting black
Included accessories	Windscreen, two-piece shock mount CPSM-Kit
Connector type	depends on version
Dimension	PC-12: 299 x 6.4 mm (11.77" x 0.25") PC-18: 461 x 6.4 mm (18.15" x 0.25") (gooseneck)
Weight net	PC-12: 411 g (0.91 lbs.) PC-18: 539 g (1.19 lbs.)

PolarChoice™ Desktop & PolarChoice™ Satellite

PolarChoice Desktop and Satellite microphones add mobility & flexibility to PolarChoice's excellent sound qualities :

PolarChoice Desktop

The PolarChoice Desktop is a free-standing podium style microphone, firmly anchored in place by its elegantly designed base. Select one of four polar patterns (omni, cardioid, super-cardiod or hyper-cardioid), via the easy to access switch. All patterns feature identical voicing, eliminating the need to retune the sound system. The PC-Desktop can also be interfaced to an auto-mixer for use in those large and difficult, multiple microphone installations.

The free standing and movable PolarChoice Desktop can be used anywhere a gooseneck or podium style mic is needed, but a permanent installation is not possible, required or desired. Whether it's a boardroom conference table, video-conference facility, training room, house-of-worship altar, or even on a podium - with the PolarChoice Desktop, anything is possible.

PolarChoice Satellite

The PolarChoice satellite brings the benefits of wireless to the boardroom, conference center, or podium. The Polar-Choice Satellite is a free-standing gooseneck-style microphone, firmly anchored in place by its elegantly designed base. This low-profile foundation hides PolarChoice Satellite's most powerful feature: space for a wireless transmitter. Turn the base over to reveal the specially designed compartment for housing a Telex or Electro-Voice body-pack transmitter. Connect the microphone to the bodypack, set up the wireless channel, and place PC Satellite anywhere an easy-to-use microphone is required. No longer do you have to cut holes in tables, run long cables, or compromise the architectural integrity of an installation. With the PolarChoice Satellite, anything is possible.

PolarChoice Desktop

PolarChoice Satellite

SPECIFICATIONS	PolarChoice Desktop	PolarChoice Satellite
Element type	Back electret condenser	Back electret condenser
Selectable Polar Patterns	Omni,Cardioid,Supercardioid,Hypercardioid	Omni,Cardioid,Supercardioid,Hypercardioid
Impedance	200 Ohms	200 Ohms
Frequency Response	50 Hz - 20 kHz(mic system)	50 Hz - 20 kHz(mic system)
Open Circuit Voltage	5,6 mV/Pascal	5,6 mV/Pascal(mic system)
Equivalent Noise	< 26 dB SPL(A-weighted)	< 26 dB SPL(A-weighted, mic system)
Max. SPL	>135 dB	>135 dB(mic system)
Power requirement	24 to 52 Volt Phantom Power	5 V DC from Beltpack
Current Consumption	3 mA	3 mA
Finish	Nonreflective Black	Nonreflective Black
Included Accessories	Multiport Windscreen	Multiport Windscreen
Connector Type	3-pin XLR	TA4F
Dimensions	45 x 114 x 178 mm(HWD) excl.gooseneck 1.77" x 4.49" x 7.01"(HWD) excl.gooseneck	45 x 114 x 178 mm(HWD) excl.gooseneck 1.77" x 4.49" x 7.01"(HWD) excl.gooseneck
Weight	690 g (1.52 lbs.)	690 g (1.52 lbs.) + beltpack

Professional Wireless Microphones

RE1 WIRELESS™

Receiver

- Optimized channel groups allow up to 16 systems to operate simultaneously in one frequency band. For groups larger than 16, EV can help with the coordination and custom groups are easily programmed.
- Programmable in 25 kHz steps across 24 MHz operating bandwidth, there are over 950 possible channels so you can always find a clear channel.
- Advanced ClearScan™, automatic group and channel selections, allows quick, simple setup.
- Backlit LCD Display shows the Sound Engineer the Group/Channel, transmitter battery status, diversity operation, RF and Audio level meters, and space for a custom name (2 lines, 10 characters each).
- Specially designed "Sound Check" mode provides the abil one person to walk-test the microphone in the perforn space with tangible results.
- Patented DSP Secure-Phase™ Diversity System for maximum range and audio quality.
- Balanced XLR microphone output and 1/4-inch unbalanced adjustable line-level output to match the application.
- CDR-1000 Dual Receiver includes internal power supply, headphone monitoring jack, balanced line-level output, antenna pass through, DC power on antenna jacks for optional RF amplifier, and RE-OneLink™ PC software for remote monitoring and control.
- Rackmount hardware included.
- Three-Year Limited Warranty.

Transmitter

Transmitter Features

- Unique "smart" battery circuit in the transmitters means there is no way to put the battery in wrong.
- LCD display and the same four control buttons as the receiver so programming a channel or frequency is quick and easy.
- Low battery LED lights when the battery needs a replacement.
- One on/off switch that also acts as a mute (great for pauses in presentations and worship services).
- On/off button can be disabled to prevent accidental turnoffs during a performance.
- Normal and High power transmit means you use just enough power for the application, which maximizes the number of simultaneous systems and limits RF spill over into adjacent buildings/theaters.

Handheld Features

- Interchangeable microphone head allows a choice of elements to fit the vocalist's style and environment.
- N/DYM® 767a premium dynamic vocal microphone with VOB™ (Vocal-Optimized Bass), excellent gain-before-feedback for high SPL stages.
- The new RE510 premium condenser vocal microphone for experienced vocalists, spoken word and quieter stages.
- Internal 1/2-wave antenna for excellent range; stays out of harm's way.
- An over-molded Warm-Grip™ handle reduces handling noise and encourages proper microphone technique for better performances.

Professional Wireless Microphones

RE 1 WIRELESS

CSR-1000 Receiver

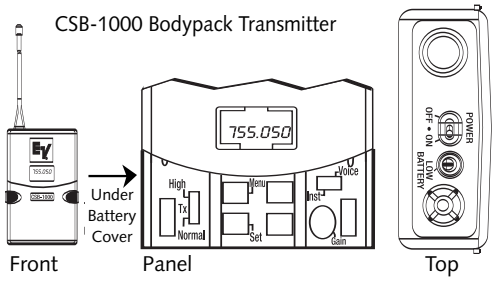
Controls	
Front Panel:	On/Off, Menu, Set, Up, Down Buttons
Rear Panel:	1/4 in. output level
Indicators LCD Backlit Display:	Group, Channel, Diversity, Label, Set-up Transmitter Battery Level, Audio Signal Amplitude and RF Signal Strength, Squelch
Connectors Back Panel:	1/4 in. unbalanced adjustable line level output XLR balanced mic level output USB programming port
Antennas:	Detachable 1/4 wave
RF Specifications Frequency Range:	A Band 680 - 709 MHz D Band 798.1 – 821.9 MHz B Band 722 - 746 MHz E Band 841.1 – 864.9 MHz
Number of Channels:	950 possible (programmable in 25kHz steps) per band
Diversity:	DSP SecurePhase True Diversity
Squelch:	Tone Code plus Adjustable Amplitude
Receiver Type:	Synthesized PLL Agile UHF
RF Sensitivity:	<0.8uV for 12 dB SINAD
FCC Type Acceptance:	Approved under Part 15
Audio Specifications Frequency Response:	100 – 15 kHz +/- 2 dB Microphone 30 – 15 kHz +/- 2 dB Instrument
Audio Output Level: Line Level Balanced	8 mV - 0.775V RMS @ 100 kohm load -10 dBV max (@ 40kHz deviation)
Distortion:	Less that 0.5% (@ 1kHz, 40 kHz deviation)
Signal to Noise Ratio:	> 110 dB (A)
Dynamic Range:	>100 dB
General Specifications Power Supply:	External 12 VAC 750mA in-line with cord
Size:	1.72 in. H x 7.50 in. W x 8.38 in. D 43.69 mm H x 190.50 mm W x 212.85 mm D

CSR-1000 Receiver

Front

Back

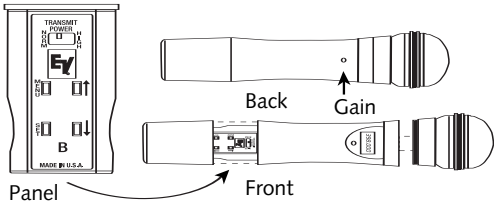
CSB-1000 Bodypack Transmitter



CDR-1000 Features

Additional Audio Output:	Adjustable Balance Line Level at XLR
Additional Controls:	1/4 in. Headset Jack with Selector and Volume Control
Antenna Output:	TNC
Powerered Antenna Inputs:	12Vdc,15mA
Power Supply:	Internal, Universal Cord
USB Monitoring & Contol:	RE-OneLink Software
Size:	1.72 in. H x 16 in. W x 12 in. D 43.69 mm H x 406.4 mm W x 304.8 mm D

CSH-1000 Handheld Transmitter



CSB-1000 Bodypack Transmitter

Controls:	Power On/Off, Audio Gain Adjustment with 40 dB range, Transmit Power Switch, Microphone/Instrument Switch (0,-20 dB), Menu, Set, Up, Down Buttons
Indicators:	Red LED Low Battery Indicator, LCD displays one of the following: Channel/Group, Frequency, or Battery Level
Battery Life:	8 hours with 9V alkaline typical
Antenna:	External 1/4 wave detachable
Connector:	TA4F input for microphone Pin 1 ground, Pin 2 Mic input Pin 3 +5V Bias, Pin 4 +5V through 3k ohm
RF Output: Normal: High:	5 mW typical 50 mW typical
Case Material:	Cast Magnesium
Size:	3.75 in. H x 2.6 in. W x 0.9 in. D 94 mm H x 66 mm W x 23 mm D

CSH-1000 Handheld Transmitter

Controls:	Power On/Off, Audio Gain Adjustment with 40 dB range Transmit Power Switch, Menu, Set, Up, Down Buttons
Displays:	Red LED Low Battery Indicator, LCD displays one of the following: Channel/Group, Frequency, or Battery Level
Battery Life:	8 hours with 9V alkaline typical
Antenna:	Internal 1/2 wave
Microphone Elements:	EV N/D 767a Dynamic or RE-510 Condenser
RF Output: Normal: High:	5 mW typical 50 mW typical
Size:	10.5 in. (26.8 cm) long

RE-1 Accessories and Parts

	Model #
Omnidirectional MicroMini™ Lapel Mic:	RE90TX
Unidirectional Lapel Mic:	RE92TX
Headworn Cardiod Condenser Mic:	HM7
1/2 Wave Rx Antenna:	FA-1
1/2 Wave Antenna Bracket:	AB-2
UHF Antenna Amplifier:	UAA-500
Antenna /Pwr Distribution:	APD- 4+
Termination Plug For APD-4:	TP-2
Directional Rx Antenna (450-900 MHz):	LPA-500
Low Loss Coaxial Antenna Cable:	CXU-25 ft CXU-50 ft
1/4 Wave Super-Flex Tx Antenna:	AN-Sflex
Bodypack Pouch:	WP-1000
Guitar Cord:	MAC-G2
767a Dynamic Head for CSH-1000:	RC767A
RE510 Condenser Head for CSH-1000:	RC510
Mic Stand Adapter for CSH-1000:	MSA-1000

UHF Wireless Microphone System

RE-2 UHF systems provide groups of up to 10 simultanous, harmonized channels per frequency bands.
Besides individual components, following complete sets, including transmitter and receiver are available :

RE2-N2	Receiver + N/D267a handheld transmitter
RE2-N7	Receiver + N/D767a handheld transmitter
RE2-410	Receiver + RE410 handheld transmitter
RE2-G	Receiver + bodypack transmitter + MAC-G3 guitar cord
RE2-BP	Receiver + bodypack transmitter
RE2-L10	Receiver + bodypack transmitter + OLM10 lavalier mic
RE2-L21	Receiver + bodypack transmitter + ULM21 lavalier mic
RE2 Combo	Receiver + N/D267a handheld +bodypack transmitter + ULM21 lav.mic

RE-2 Receiver

- One-touch Auto-ClearScan
- Programmable in 25kHz steps across 28 MHz operating bandwidth
- Backlit LCD displays the Group, Channel, Frequency, transmitter battery level, diversity operation, and RF and Audio signal level meters
- Balanced XLR audio output for Microphone or Line level signals and a ¼-inch line level jack
- Fourth-generation Posi-phase™ diversity and advanced audio circuits
- Unique "Guitar" setting
- Detachable ¼ wave antennas

RE-2 UHF Transmitter

- Unique "smart" battery
- LCD Displays Group and Channel, Frequency, or Battery Level
- Low battery LED
- One On/Off button that also acts as a mute
- On/Off button can be disabled

RE-2 UHF Handheld

- Available with three different microphone elements
- N/DYM 267a Dynamic element
- RE 410 Condenser
- NDYM® 767a Dynamic premium vocal microphone with VOB™ (Vocal-Optimized-Bass)
- Internal ½-wave antenna

RE-2 UHF Bodypack

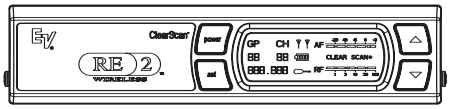
- Cell phone style beltclip
- Optional pouches available
- A wide selection of lapel and headworn microphone accessories are available

UHF Wireless Microphone System

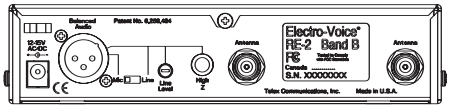
RE 2

RE-2 Receiver

Receiver Type	Synthesized PLL
Frequency Range (RF)	A Band 648 – 676 MHz B Band 696 – 724 MHz D Band 798 – 822 MHz E Band 841 – 865 MHz
Number of Channels	1112 possible channels Programmable in 25 kHz steps
Modulation	+/- 40 kHz
Diversity	Digital Posi-Phase™ True Diversity
RF Sensitivity	< 1.0 mV for 12 dB SINAD
Image Rejection	> 60 dB
Squelch	Tone Code plus Amplitude
Ultimate Quieting	> 100 dB
FCC Certification	Approved under Part 15
Power Requirements	12 V AC/DC 300 mA
Antennas	Detachable 1/4 wave
Dimensions	43.69 cm H x 190.50 mm W x 150 mm D 1.72" H x 7.50" W x 5.9" D



Front

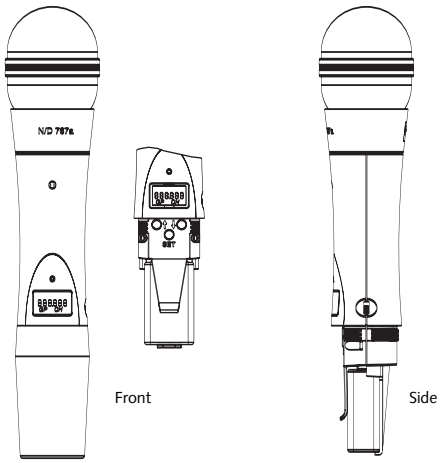


Back

RECEIVER

Audio Parameters

Frequency Response	50 – 15 kHz +/- 2 dB
Balanced Output (max @ 40 kHz deviation) Mic Position Line Position	 -10 dBV Adjustable 10 mV-2V RMS
Unbalanced Output	Adjustable 10 mV-1V RMS
Distortion	<1.0%, 0.5% typical (ref 1 kHz, 40 kHz deviat)
Signal-to-Noise Ratio	>100 dB A Weighted
Dynamic Range	>100 dB
Transmitters, Bodypack (BPU-2) and handheld (HTU-2)	
Radiated Output	30 mW typical
Microphone Head Electro-Voice 767a	N/D 767a Supercardioid N/DYM Dynamic
Microphone Head Electro-Voice 267a	N/D 267a Versatile Cardioid Dynamic
Microphone Head Electro-Voice RE 410	RE 410 Classic Cardioid condenser
Standard Lavalier Microphone	EV RE 90Tx MicroMini™ Omni-Directional Condenser
TA4 Connector Wiring	Pin 1: Ground; Pin 2 Mic Input; Pin 3: +5V bias; Pin 4: +5V bias through a 3kW resistor
Audio Gain Adjustment	40 dB (handheld 26 dB)
Power Requirements	9 Volt Alkaline Battery
Battery Life (Typical)	> 8 hours with 9-Volt Alkaline Typical
Bodypack Antenna	Flexible external 1/4 wave
Handheld Antenna	Internal 1/2 wave
Dimensions (Handheld)	24.0 cm (9.4 in.) Long
Dimensions (Bodypack)	96.5 mm H x 66 mm W x 23.4 mm D 3.8 in. H x 2.6 in. W x 0.92 in. D

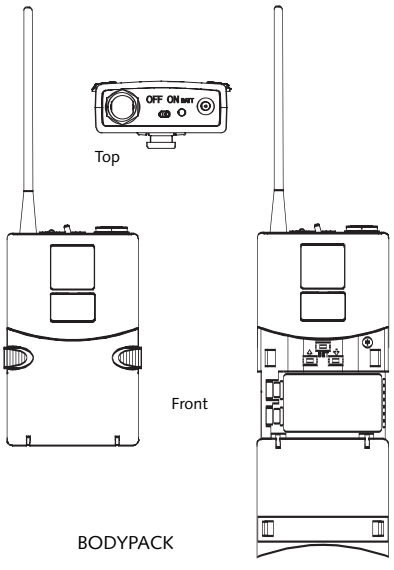


Front Side

HANDHELD

Transmitters, Bodypack

Radiated Output	Normal 5 mW typical High 50 mW typical
Interchangeable Microphone Heads	767a Supercardioid N/DYM Dynamic RE 510 Supercardioid Condenser
Bodypack Antenna	Detachable Flexible external 1/4 wave
Handheld Antenna	Internal 1/2 wave
Dimensions (Handheld)	26.8 cm (10.5 in.) Long
Dimensions (Bodypack)	Cast Magnesium 96.5 mm H x 66 mm W x 23.4 mm D3.8 in. H x 2.6 in. W x 0.92 in. D



Top

Front

BODYPACK

RE-2 PRO System

RE-2 PRO Reciever

All of the great RF and Audio features of the RE-2 receiver plus all of the rack hardware to install it including front mount antenna cables.

RE-2 PRO Handheld

All of the great features of the RE-2 handheld plus detachable microphone heads, RE510 mic head, and Normal/High transmit power.

RE-2 PRO Bodypack

All of the great features of the RE-2 transmitter plus a cast magnesium metal housing, detachable antenna and Normal/High transmit power.

SPECIFICATIONS

Transmitters, Bodypack (BPU2PRO) and handheld (HTU2PRO) Additional Features

Radiated Output	Normal 5 mW / High 50 mW typical
Interchangeable Microphone Heads	767a Supercardioid N/DYM Dynamic RE 510 Supercardioid Condenser
Bodypack Antenna	Detachable Flexible external 1/4 wave
Handheld Antenna	Internal 1/2 wave
Dimensions, Handheld (L) mm	268 mm (10.55") long
Dimensions, Bodypack (H x W x D)	96.5 x 66.0 x 23.4 mm (3.8" x 2.6" x 0.92) Cast Magnesium

Cobalt R100 VHF

R-100 VHF System

The COBALT R100 VHF systems operate in the frequency band between 174.100 and 185.350 MHz (channels 7-8 in the TV band). With the R100 Series, having EV wireless freedom has never been more affordable, cost-effective or practical. The R100's rock-solid RF performance is the result of superior design and state-of-the-art manufacturing. The R100 receiver can also be rack-mounted with the optional RMR accessory kit.

SPECIFICATIONS

RF Frequency Range:	174.100-203.200 MHz (11 stock frequencies)
Audio Frequency Response:	20 Hz-15 kHz +/- 2 dB
Harmonic Distortion:	<0.5%
Radiated RF Output:	35-45 mW typical, 50 mW maximum
Audio Output Level:	.775 V rms into 100 kΩ load
Battery Life:	8-12 hours typical
Available Systems:	R100VHC7 Electro-Voice Co7 Handheld Dynamic • R100VHC11 Electro-Voice Co11 Handheld Condenser R100VL Electro-Voice OLM10 Lavalier Condenser • R100VE Electro-Voice HM2 Headworn Condenser R100VG Electro-Voice Guitar System

RTM-1000 Remote Test System

RTM-1000 transmitter is shown with the mounting strap and cable adapter. (Microphone and mic stand not included)

Reduce the hassle and improve the results of your pre-concert soundchecks with the RTM-1000 Remote Test Wireless System. This system provides a wireless link between your calibrated measurement microphone and audio analyzer. That means you can quickly test multiple locations from the front row to the nosebleed seats in the time it would take to haul long mic cables to just one spot.

- Wireless link between test microphone and audio analyzer allows faster, easier measurement of large performance spaces
- Works with most measurement microphones
- Non-companded transmission does not affect audio quality

The key feature of the RTM-1000 is the compander on/off switches on both the receiver and bodypack transmitter. Wireless mic systems normally use companding (compressing/expanding) to stuff more dynamic range through narrow wireless channels. But companding can also add coloration or distortion to the signal. The RTM-1000 lets you defeat the compander circuit, leaving the signal from mic to analyzer unchanged.

- **MOUNTING STRAP**
- **LEMO-to-XLR ADAPTER CABLE**
- **AC ADAPTER (as pictured at left)**

SPECIFICATIONS

Receiver

Controls	
Front Panel:	Power On/Off
Rear Panel:	Microphone Output Adjustment
Indicators	
Diversity Lights:	Indicates antenna phase relationship
Audio Meter:	Shows audio signal level from the transmitter
RF Meter:	Shows the RF signal strength
Connectors	XLR balanced output
Antennas	Detachable 1/2- wave ground independent
RF Specifications	
Frequency:	722-746 MHz Fully Programmable
Diversity:	Full True Diversity
RF Sensitivity:	<0.5uV for 12 dB SINAD
FCC type acceptance:	Approved under Part 15
Audio Specifications	(compander active)
Frequency Response:	50 Hz – 15 kHz ± 1 dB
Audio Output Level:	-50 dBm to –10 dBm into 200 Ohms
Distortion:	Less that 0.5%
Dynamic Range:	100 dB
Audio Specifications	(compander inactive)
Signal to Noise Ratio:	62 dB typical

Transmitters

Controls	Power on/off switch
	Audio mute on/off switch
	Audio gain adjustment with 40 dB range
Indicators	Red LED low battery indicator
Battery Life	7 hours with 9-volt alkaline
Antenna	1/4-wave detachable
Connector	Microphone input 4-Pin TA4M
	Pin 1: ground; Pin 2: Mic input;
	Pin 3: +5V bias; Pin 4: +5V through 3k ohm
RF Output	Adjustable 5 or 50 mW Typical
Size	94 mm x 66 mm x 23 mm 3.7" x 2.60" x 0.91"

Accessories

OLM 10
- Lavalier mic
- Includes shown accessories

ULM 21
- Lavalier mic
- Includes shown accessories

RE92 TX
- Lavalier mic
- Hi-Performance
- Includes shown accessories

RE 90 TX
- Lavalier mic
- Top-class
- Ultra-miniature
- Includes shown accessories

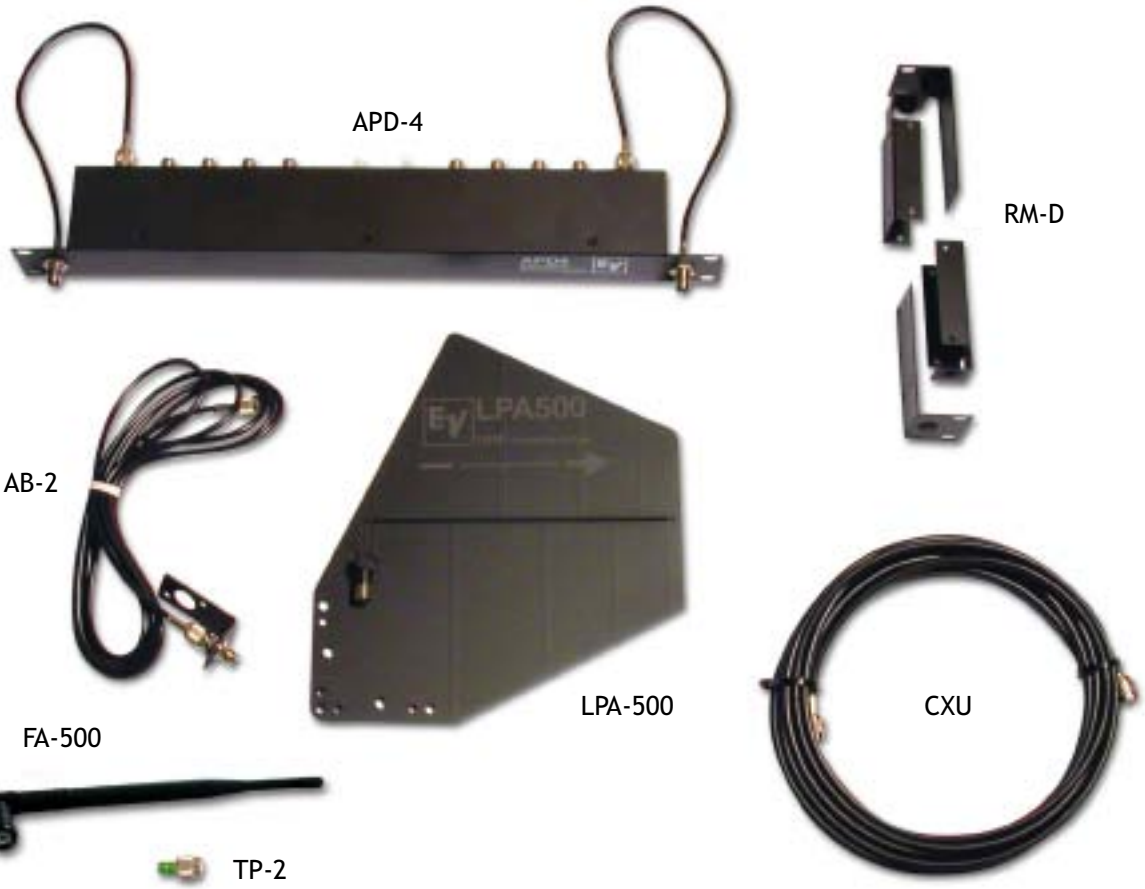
HM 2
- Headset mic
- Includes shown accessories

HM 7
- Headset mic
- Top-class
- Super lightweight and comfortable
- Includes shown accessories

SPECIFICATIONS

	OLM 10	ULM 21	RE 90 TX	RE92 TX	HM 2	HM 7
Element	Back electret condenser	Back electret condenser	Back electret condenser	Back electret condenser	Back electret condenser	Back electret condenser
Polar pattern	Omnidirectional	Cardioid	Omnidirectional	Cardioid	Cardioid	Supercardioid
Impedance, Low-Z balanced	---	80 - 16.000 Hz	---	---	---	---
Frequency Response (-3 dB)	t.b.a.	t.b.a.	50 - 18.000 Hz	t.b.a.	30 - 18.000 Hz (12mm)	100 - 15.000 Hz
Output Level (0dB = 1mW/Pascal) 1.000 Hz)	---	---	---	---	---	---
Open Circuit Voltage (at 1.000 Hz)	t.b.a.	2.5 mV/Pascal	12.6 mV/Pascal	t.b.a.	4.0 mV/Pascal	7.0 mV/Pascal
Maximum SPL (THD)	t.b.a.	120 dB (1% THD)	130 dB (1% THD)	t.b.a.	120 dB (1% THD)	120 dB (3% THD)
Power requirement (Phantom power)	from Bodypack	from Bodypack	from Bodypack	from Bodypack	from Bodypack	from Bodypack
Current Consumption	t.b.a.	t.b.a.	---	t.b.a.	max. 0.5 mA @ 9 VDC	---
Specials	---	---	Sub-miniature	---	---	Ultra-lightweight
Case Material (Capsule enclosure)	Plastic	Plastic	Polycarbonate resin	Metal	Plastic	Plastic
Finish	Nonreflecting black	Nonreflecting black	Nonreflecting black	Nonreflecting black	Nonreflecting black	Nonreflecting black
Included accessories	approx. 180 cm permanently attached cable, windscreen, universal tie clip	approx. 180 cm permanently attached cable, windscreen, universal tie clip	approx. 180 cm permanently attached cable, windscreen, universal tie clip, tie tac	approx. 180 cm permanently attached cable, windscreen, universal tie clip	approx. 120 cm permanently attached cable, windscreen, cable clip	approx. 120 cm permanently attached cable, windscreen, cable clip
Optional Accessories	---	---	---	---	---	---
Connector type	4-pin TA4F	4-pin TA4F	4-pin TA4F	4-pin TA4F	4-pin TA4F	4-pin TA4F
Dimension (Length x Diameter)	t.b.a.	0.71 in. x 0.29 in.	.025 in. x 0.19 in.	0.948 in. x 0.412 in.	---	---
Weight net	t.b.a.	t.b.a.	34 g	t.b.a.	25 g	70 g

Accessories

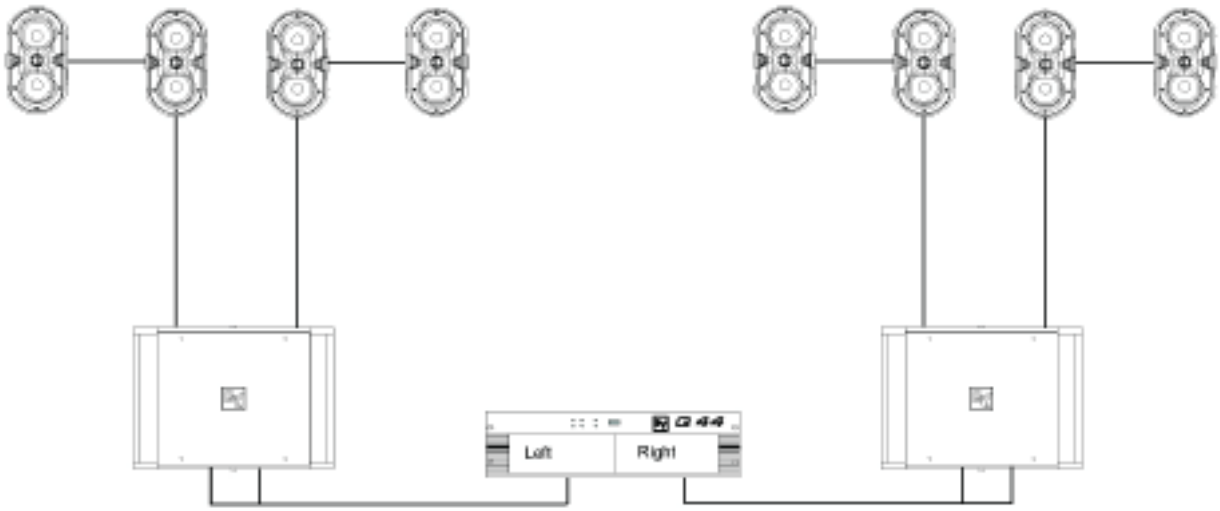


Electro-Voice Wireless Accessories - Antennas etc.

APD-4	UHF Antenna/power distribution system (provides power and RF signals for 4 units) for use with RE-2 & RE-1
RM-D	Rack-mount kit - double (for two receivers) works with RE-2, RTM-1000 and RE-1 receivers
AB-2	Universal mounting bracket for 1/2-wave antennas, with 10-foot coax cable
LPA-500	Directional log periodic antenna with mounting hardware and 10-foot coax
FA-500	1/2-wave UHF antenna
TP-2	50 ohm TNC termination plug for use with APD-4
CXU-X	Low-loss coax cable (X designates length, 25ft = 8 m, 50ft = 16 m)

Single-Amp Drive – Stereo

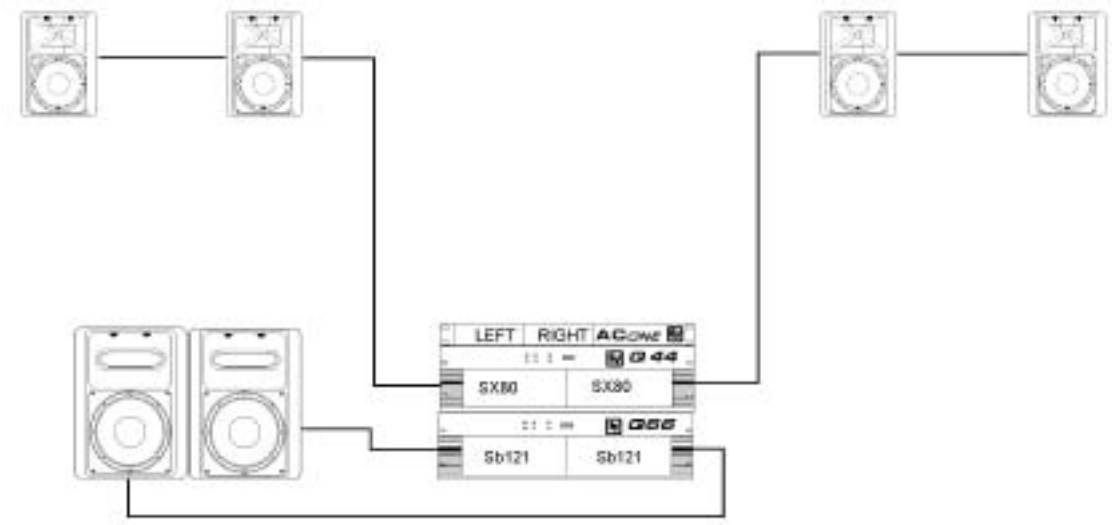
Music Pub, Cafe (Foreground Music)



Cabinets	8 EVID 4.2, 2 EVID 12.1
Amplifiers	1 Q44 or CPS1
Controllers	–
Cabling	10 2-wire long, 4 2-wire short
Accessories	(AB-62 for 180°, or AB64 for 360° Array)
Horizontal Coverage	8 x 90°, or 4 x 180°, or 2 x 360°
Typical Distance	8 to 15 m
Total Amp Power	900 W
Options	could also be used with only two 4.2's per side for smaller rooms, but high sub level requirement
Comments	inputs on 12.1 in parallel

2-Way Stereo (Mono Sub)

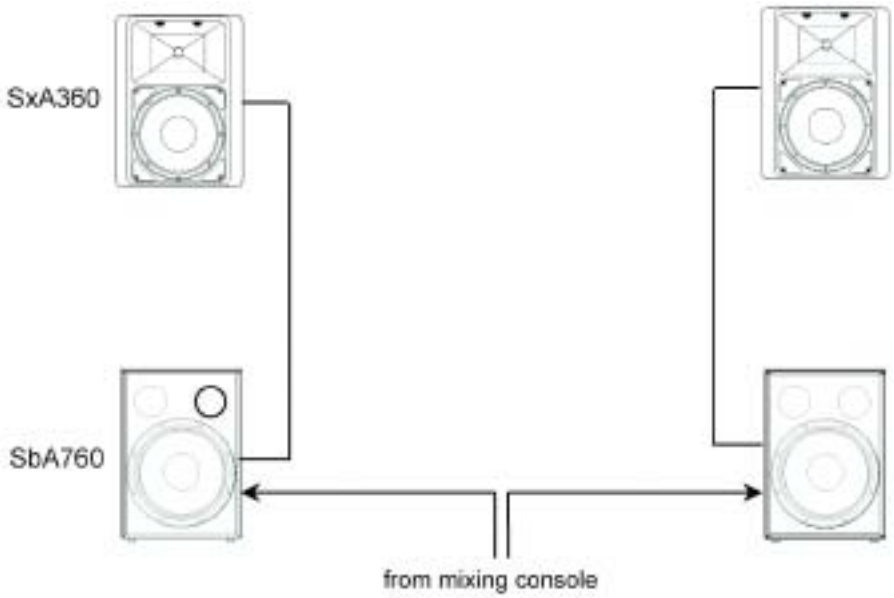
Music Bar, Cafe, Small Disco



Cabinets	4 x Sx80, 2 x Sb121
Amplifiers	1 x Q44, 1 x Q66
Controllers	1 x Ac-One
Cabling	4 x NL4 long, 2 x NL4 short
Accessories	Sx80MBB / UMH
Horizontal Coverage	2 x 100° to 150°, or 4 x 90°
Typical Distance	10 m to 15 m
Total Amp Power	2 x 830W = 1660W
Options	Third Sx80 per line could be added
Comments	Lo-Cut 50Hz, X-Over 85-90Hz, Sb121 Mono Out

3-Way Stereo

Ultracompact Hi-Power System

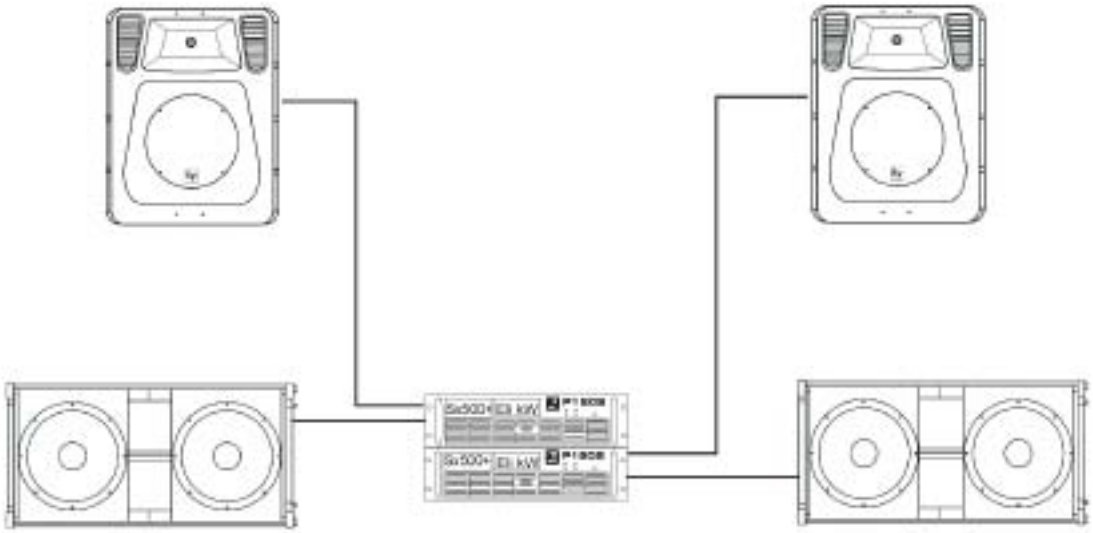


Cabinets	2 x SxA360, 2 SbA760
Amplifiers	none (included in cabinets)
Controllers	none (included in cabinets)
Cabling	2 x XLR-XLR
Accessories	2 x 100BK, 2 x MB200 + TC04

Horizontal Coverage	2 x 65°
Typical Distance	15 m to 20 m
Total Amp Power	2 x 150W + 350W + 760W = 2520W
Options	Expandable with 2 SbA760 for more Sub-Bass, and/or 2 SxA360 for wider coverage
Comments	–

2-Way Stereo

Small to Medium Club

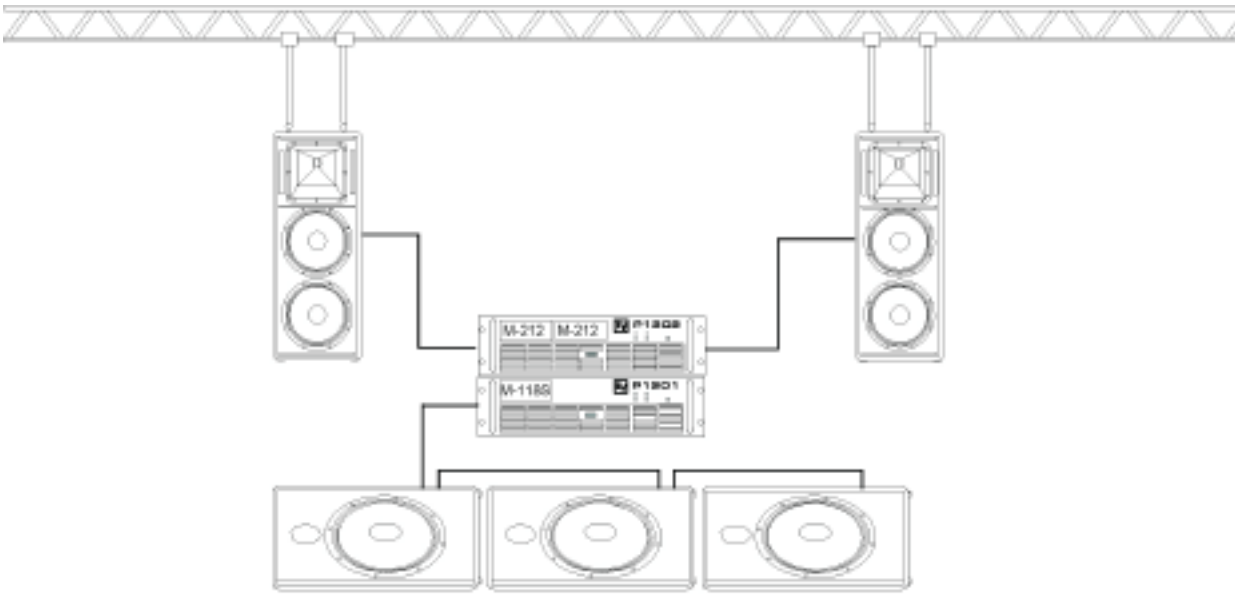


Cabinets	2 x Sx500, 2 x Eli kW
Amplifiers	2 x P1202
Controllers	P-Modules; 2 x M-Sub, 2 M-LMH
Cabling	4 x NL4 long
Accessories	2 x MB700

Horizontal Coverage	2 x 75°
Typical Distance	20 m to 25 m
Total Amp Power	2 x 980W = 1960W
Options	Second Sx500+ per side could be added for wider coverage up to 150°
Comments	If sub signals runs mono, 1 M-SUB can be saved

2-Way Stereo (Mono Sub)

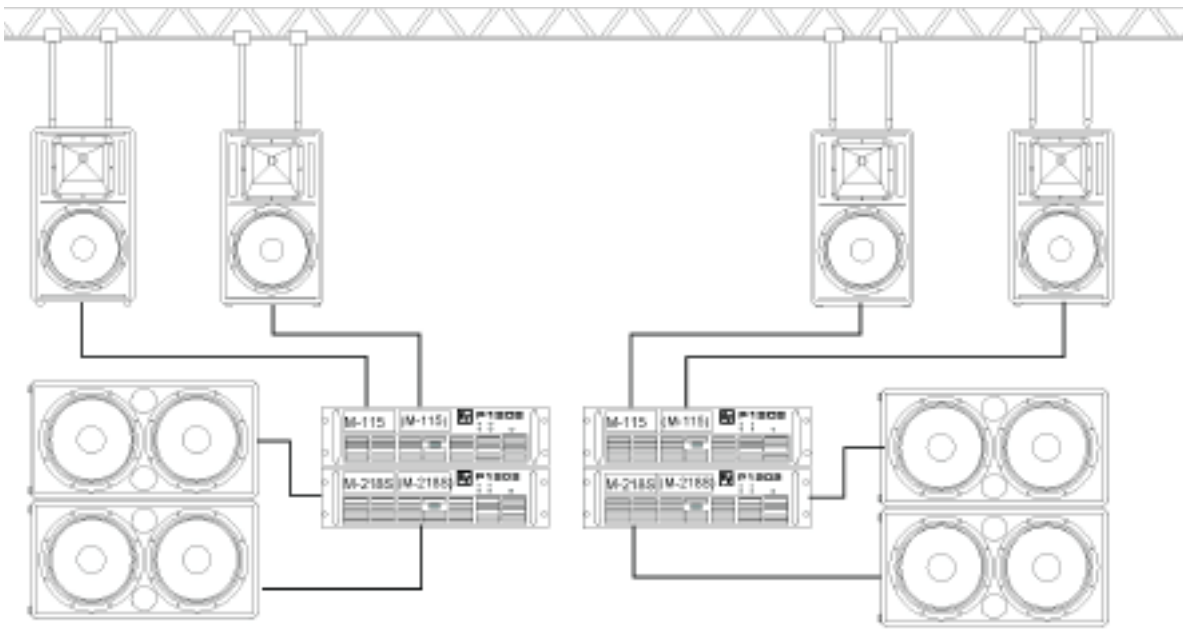
Pop Band or Disco in smaller room



Cabinets	2 x QRx212/75, 3 x QRx118S	**Horizontal Coverage**	2 x 75°
Amplifiers	1 x P1201, 1 x P1202	**Typical Distance**	15 m to 20 m
Controllers	2 x M-212 & 1 x M-118 Module	**Total Amp Power**	2 x 600W + 1.500W = 2.700W
Cabling	3 x NL4 long, 2 x NL4 short	**Options**	
Accessories	2 x QRx Rigging Kit, 3 x QRx Wheel Kit	**Comments**	System could be doubled for larger rooms

2-Way Stereo

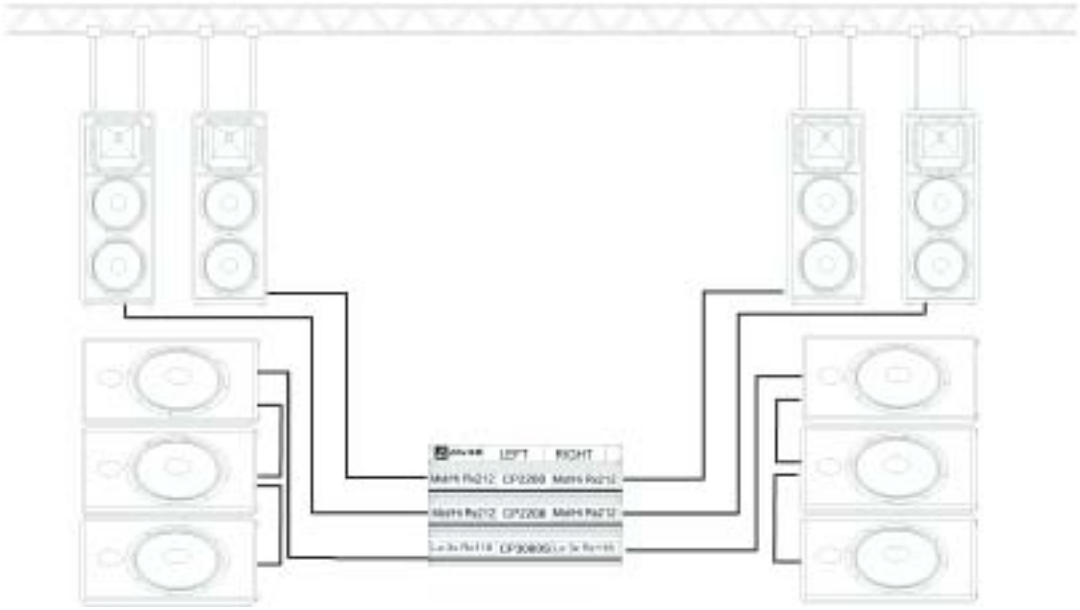
Standard PA for Concert & Disco



Cabinets	4 x QRx115/75, 4 x QRx218S	**Horizontal Coverage**	2 x 100° to 150°, or 4 x 75°
Amplifiers	4 x P1202	**Typical Distance**	15 m to 20 m
Controllers	2 x M-115 & 2 x M-218 Module	**Total Amp Power**	2 x 1,900W = 3,800W
Cabling	8 x NL4 long	**Options**	add 2 M-115 & M-218 Modules to split system into two separate systems
Accessories	4 x QRx Rigging Kit, 4 x QRx Wheel Kit	**Comments**	

2-Way Stereo

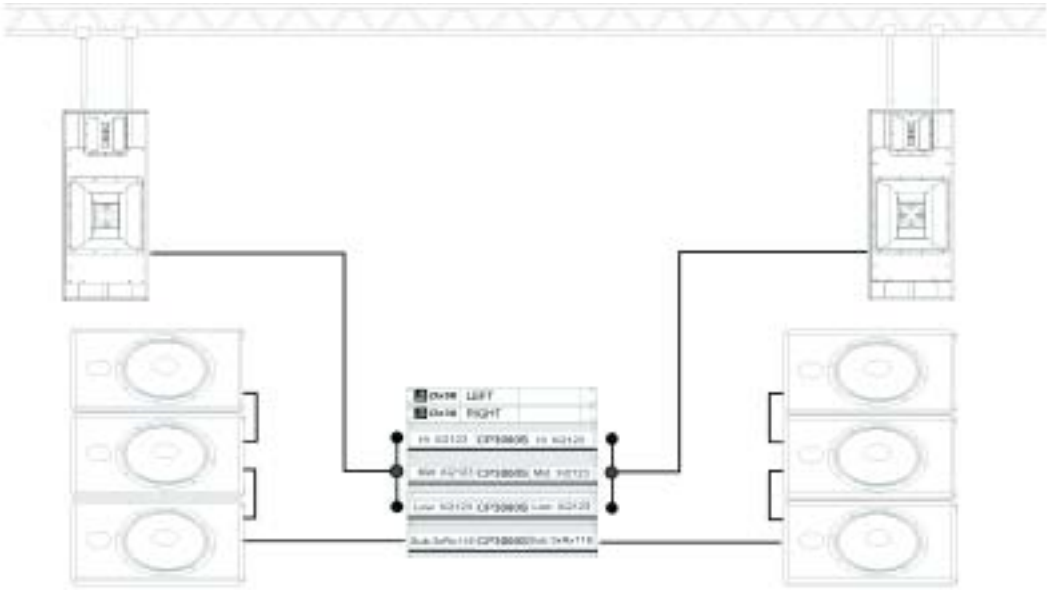
Pop/Rock Band, Medium Dance Floor



Cabinets	4 x QRx212/75, 6 x QRx118S	**Horizontal Coverage**	2 x 100° to 150°, or 4 x 75°
Amplifiers	2 x CP2200, 1 x CP3000S	**Typical Distance**	20 m to 25 m
Controllers	1 x Dx38	**Total Amp Power**	2 x 3,000W = 6,000W
Cabling	6 x NL4 long, 4 x NL4 short	**Options**	could be driven also with 2 P2000 and 1 P3000
Accessories	4 x QRx Rigging Kit, 6 x QRx Wheel Kit	**Comments**	

4-Way Stereo

Compact Hi-Resolution System



Cabinets	2 x Xi2123A/106F, 6 x QRx118S	**Horizontal Coverage**	2 x 100° (single source!)
Amplifiers	4 x CP3000S	**Typical Distance**	25 m to 30 m
Controllers	2 x Dx38	**Total Amp Power**	2 x 3,000W = 6,000W
Cabling	2 x NL4 long, 4 x NL4 short, 2 NL8 long	**Options**	Second Xi2123 per side could be added for wider or higher coverage
Accessories	2 x Xi-DSK, 6 x QRx Wheel Kit	**Comments**	Refuses the interference of 2 x 15/2 per side

4-Way Stereo

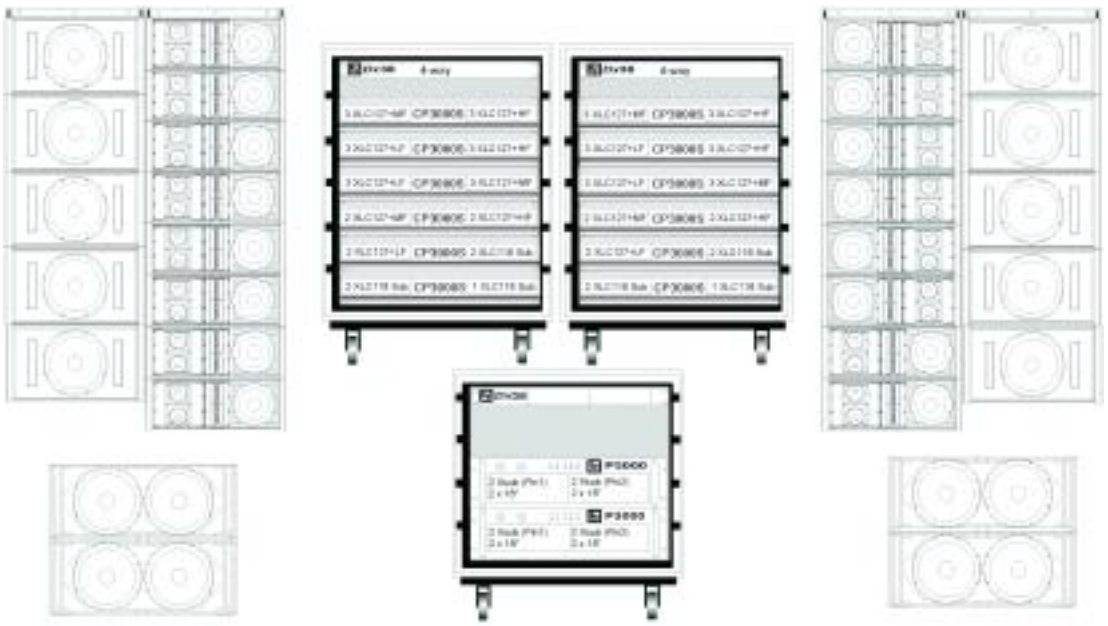
Compact Line-Array for mid-sized venues

Cabinets	12 XLC127+, 6 Xsub
Amplifiers	6 CP2200, 2 P3000
Controllers	2 Dx38
Cabling & Accessories	6 NL8 long, 12 NL8 short, 2 XLC grids, 12 dollies 127 (or 2 bottom dollies), 2 Xline dollies

Horizontal Coverage	2 x 120°
Typical Distance	30 m to 50 m
Total Amp Power	2 x 7,000W = 14,000W
Options&Comments	-

4-Way Stereo + Sub

Compact Line-Array for mid sized venues, higher SPL's

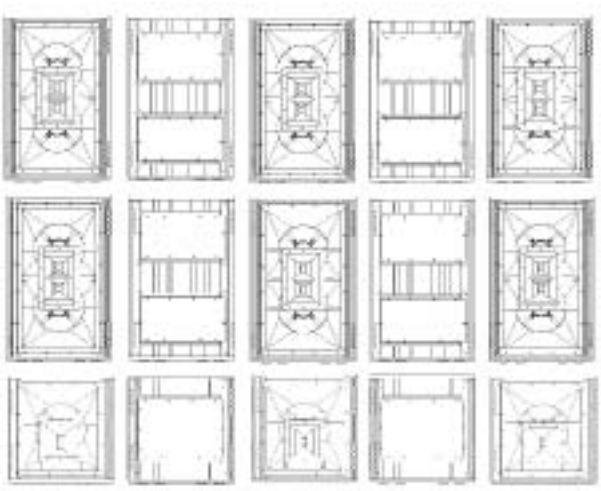


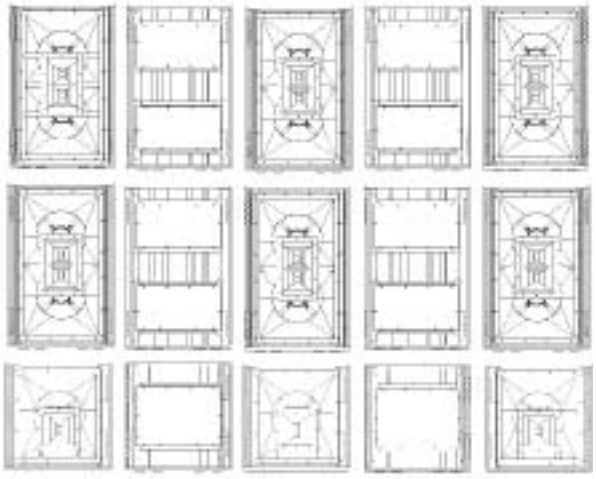
Cabinets	16 XLC127+, 10 XLC118, 4 Xsub
Amplifiers	12 CP3000S, 2 P3000
Controllers	3 Dx38
Cabling	6 NL8 long, 14 NL8 short, 4 XLC grids, 6 XLC bottom dollies, 1 Xline dolly

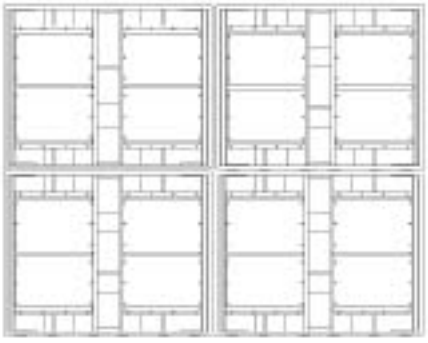
Horizontal Coverage	2 x 120°
Typical Distance	30 m to 50 m
Total Amp Power	2 x 17,000W = 34,000W
Options&Comments	XLC127+ can be driven also with P1200RL Xsub with P3000RL

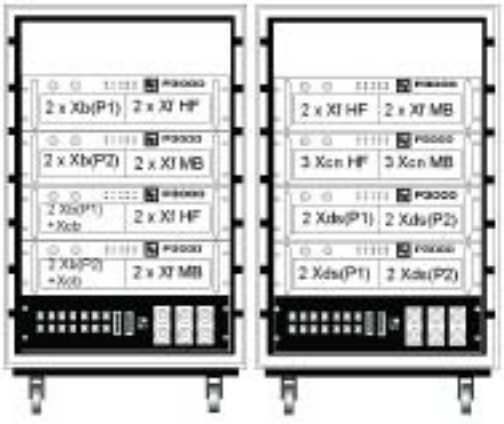
5-Way + Sub + In-Fill

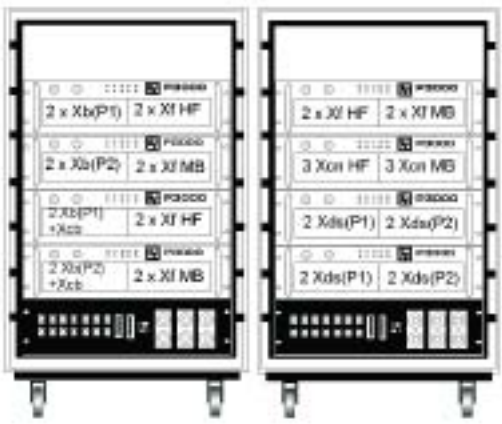
Arena up to 6000 people, wide









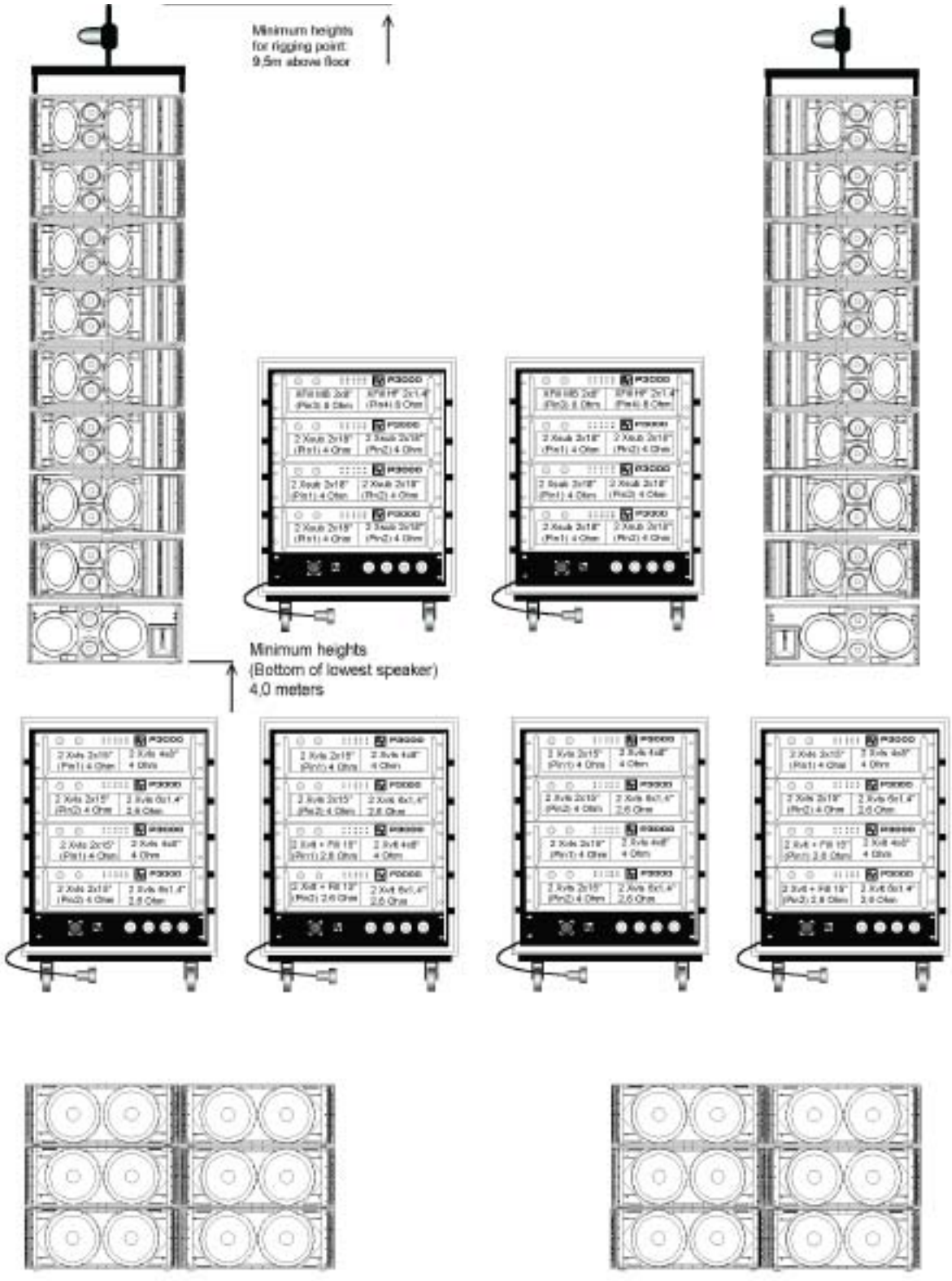


Cabinets	12 Xf, 8 Xb, 4 Xcn, 4 Xcb, 8 Xds
Amplifiers	14 x P3000 (= 4 X-Array System Racks)
Controllers	4 x Dx-38 / 2 DN9848
Cabling	10 x NL8 long, 24 NL8 short
Accessories	10 grids, 20 Xrhg & Xess, 40 Xrhl & Xesl, 14 dollies

Horizontal Coverage	2 x 100° to 120°
Typical Distance	60 m to 70 m
Total Amp Power	2 x 16.950W = 33.900W
Options	Xsubs can be used instead of Xds

8-Way Stereo, Line Array

Large Venue, Concert Sound



Cabinets:	12 Xvls, 8 Xvlt, 12 Xsub, Xfill 1 & 2
Amplifiers:	12 P3000 (= 6 X-Line Amp Racks)
Controllers:	4 DX38, or 2 DN9848
Cabling:	16 NL8 long, 16 NL8 short
Accessories:	

Horizontal Coverage:	2 x 90° (120° nearfield)
Typical Distance:	50m to 100m (depending on the rigging heights)
Total Amp Power:	2 x 28,800 W = 57,600 W
Options:	Number of Xsubs depending on music style
Comments:	Use of Xfill depending on array heights

Speaker Technologies

Ring Mode Decoupling® (RMD®)

Electro-Voice pioneered Ring Mode Decoupling (RMD®) as a result of experience gained through years of high-level concert system design. The acclaimed EV X-Array™ was the "test bed" for RMD® research. Just as automotive companies use Formula 1 racing to develop new technologies, Electro-Voice uses its work in the concert sound and touring industries to do the same. The goal of that basic research is to bring those new technologies into all aspects of the sound reinforcement industry.

All loudspeaker components display unwanted vibrational modes – or resonances – that produce both frequency and time-domain distortions. A time-domain distortion is most often described by loudspeaker users as a "ringing" in the system. This ringing is usually most audible through the vocal fundamental range, and users commonly attempt to "cure" the ringing mode through equalization. Unfortunately such attempts remove not only the time-domain distortion, or ringing, but also parts of the musical signal as well. The net result is that musical information is lost.

RMD® is a series of techniques developed by Electro-Voice engineers to deal with the time-domain distortion at its source. The basic problem is mechanical in nature. As a result, the only really effective solution is also mechanical. When acoustic resonances are encountered, the only effective solution is an acoustic remedy. The same applies to electrical resonances: The solution must be electrical.

RMD® treatment produces an acoustic signal that is much freer of mechanical and acoustical ringing modes. The result is a level of fidelity – particularly through the critical vocal range – that is more coherent and "in your face." Another benefit of RMD® technology is a much higher degree of level independence. Many front-of-house engineers have noted that system equalization needs to change with system output levels. The louder the system is driven, the more EQ changes become necessary to maintain system voicing (that is, the system sounds different at higher power levels). RMD® greatly minimizes the changes in system voicing that occur with level changes. Systems with RMD®, therefore, display a high degree of level-independent fidelity and a very audible improvement in vocal clarity as well.

Power handling ratings

Accurately specifying power handling ratings presents a challenge with odds typically worse than those in a game of chance. Each manufacturer rates its components in its own particular way. While responsible manufacturers always qualify their testing methods, this offers little help to users not familiar with the different test methods.

Electro-Voice has used an EIA-based rating for many years. It offers a reasonably good combination of mechanical (excursion) and thermal (heat) stress measurements. The ratings supplied with EV components are very conservative, and require a full eight-hour test cycle to generate.

However, Electro-Voice does not limit its power testing to EIA methods. Long term continuous musical testing of rated program limits is typically performed for 200-hour durations. EV engineers also perform mixed-signal testing, a combination of continuous noise (EIA- or AES-based shaped spectrum signals) and low-frequency impulsive signals (such as kick drums). Mixed signal tests often represent typical program material, and the resulting measurements relate better to real-world conditions.

The most useful power handling rating is that of the program material specification. This rating relates well to "in the field" situations for most musical programs. It should always be remembered that no test method or rating spec will universally describe every situation. Extreme power levels can produce either mechanical or thermal failures with any manufacturer's components.

Manifold Technology®

In 1986, Electro-Voice revolutionized concert sound reinforcement by introducing Manifold Technology®. In each of the four bandpasses covering the entire frequency range, the output of four loudspeakers was flawlessly combined – or "manifolded" – into a single horn (such as a large-format MH horn) or low-frequency enclosure. The result was a physical package, a fraction of the size of conventional concert rigs but with four times the acoustic output. This eliminated the drastically uneven coverage that occurs when multiple acoustic sources are stacked to gain more output. Manifold Technology® came into its own particularly in smaller-sized locations or installations, where low-frequency output was limited by the space available.

Speaker Technologies

Vertical Beam Shaping

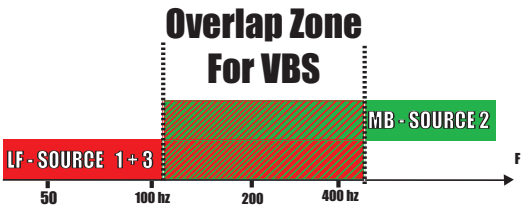
(2- or 3-element line array)

VBS

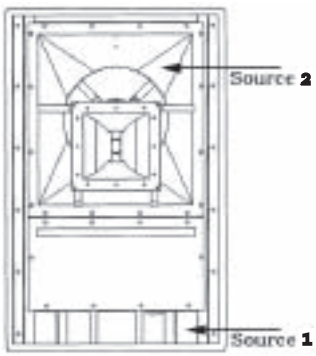
Verticl Beam Shaping (VBS) is a frequency overlap configuration of the dual-woofer three-way systems of Xi-Series™. It provides the best directivity improvement, achieved by the vertically spaced low-frequency sources which flank the mid-bass horn operating alone at low frequencies and by appropriately overlapping the LF and MB sources in the mid bass, e.g., 125 to 540 Hz.
The single-woofer three-way systems may be configured for VBS, achieved by overlapping the (single) woofer and mid-bass source in the appropriate frequency ranges. This physical orientation of three sources, together with appropriate amplitude shading and filter comibinations, produces vertical directivity control to below 125 Hz.

The resulting interferences of normal overlapped speakers are completely minimised. The sonic advantages of this combination are significant. Precisely controlled radiation patterns at low frequencies prevent reverberant energy in the 125- to 600-Hz range from degrading vocal fundamentals. The pattern control achieved by this three-source, single-enclosure "array" prevents the critical distance from moving "forward" (toward the source) as wavelengths become significant in size with respect to the radiation device, and pattern control is lost. This is the case with conventional system designs. The other primary advantage is that down to 125 Hz, acoustic output under the enclosure is a full 12 dB or more below on-axis levels.

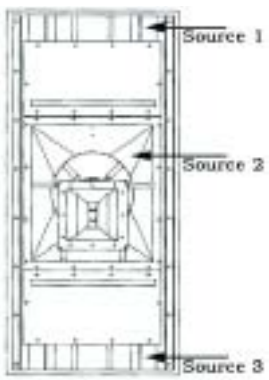
This results in greatly improved gain-before-feedback levels on stage especially in theatres where lavalier microphones are traditionally used under centre speakers. In conventional systems where "under enclosure" levels are comparable to on-axis levels, system intelligibility is even compromised at the source (microphone) because of poor loudspeaker directivity control and subsequent "spill over".



2-ELEMENT



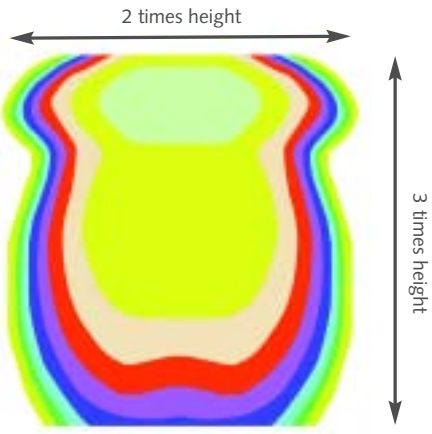
3-ELEMENT



Vari Intense®

EV's unique Vari Intense® (VI) technology has a lot of advantages in most applications of "typical sized" rooms. Vari Intense® provides a rectangular coverage pattern. The unique, patented throat and flare structure of the VI horn delivers a 6 to 10 dB hotter signal to the rear of the room.
The resulting even front-to-back SPL eliminates ear strain at the back of the sitting area and ear pain at the front. One VI horn replaces two standard systems that reduce costs and eliminates destructive interference which occurs between long- and short-throw horns or multi-sourced horizontal arrays.
The downward-aimed horn delivers sound only to the floor plan where the audience is and provides uniform direct-field SPL and significantly reduces the amount of sound reverberating off the ceiling. This provides an increase in mid- to high-frequency intelligibility of 6 dB in most applications.

To plan with Vari Intense® systems is very easy. The height of the room defines the size of the floor plan covered with one speaker. The area covered would be a width coverage of two times the height of the ceiling and depth, or throw, three times the height of the ceiling. Therefore a Vari Intese® speaker mounted centrally, parallel to the floor, at a height of 3 meters, would cover a room with equal SPL, 6 meters wide by 9 meters long. Aiming the speaker down by 15 degrees at the same 3 meter height will produce an even floor plan SPL that is 3 meters wide by 6 meters long and tilting it back by 15 degrees, at the same height, produces a floor plan SPL of 6 meters wide by 15 meters long. Normally the loudspeaker is mounted approximately 0.6 to 0.8 times the height back from the first row and has a nominal angle of the top of the enclosure parallel to the floor or slightly (2 to 3 degrees) tilted back.



covered floor plan of a VI horn

Speaker, Distances and Horns

This graph should help you to get a feeling of coverage angles, loss in SPL and covered areas.
The following questions can be answered:

1. *Question:* "What coverage angle is needed to cover a width of X meters by the maximum possible distance to the audience of Y meters?" Helpful when the install position of the speakers and the area to cover are predetermined.

   Solution: Possible distance to the audience is a maximum of 12 meters. Covered width should be approx. 36 meters (2 x 18 meters). A system that provides 120 degrees coverage is needed.

2. *Question:* "Which system is needed when the distance to the audience and the target SPL is known?" Helpful when the install position of the speakers is known and a pre-defined SPL is required.

   Solution: Inverse square law of a point source (-6dB when doubling the distance) helps to define the loss in SPL at a distance of X meters. The pre-determined SPL at listening level (the audience) should be 100 dB. Distance to the speaker is approx. 50 meters (I.E. open-air, arena etc). The loss in SPL after 50 meters is approx. 33 dB, therefore the system has to provide a continuous SPL of 133 dB/1m.

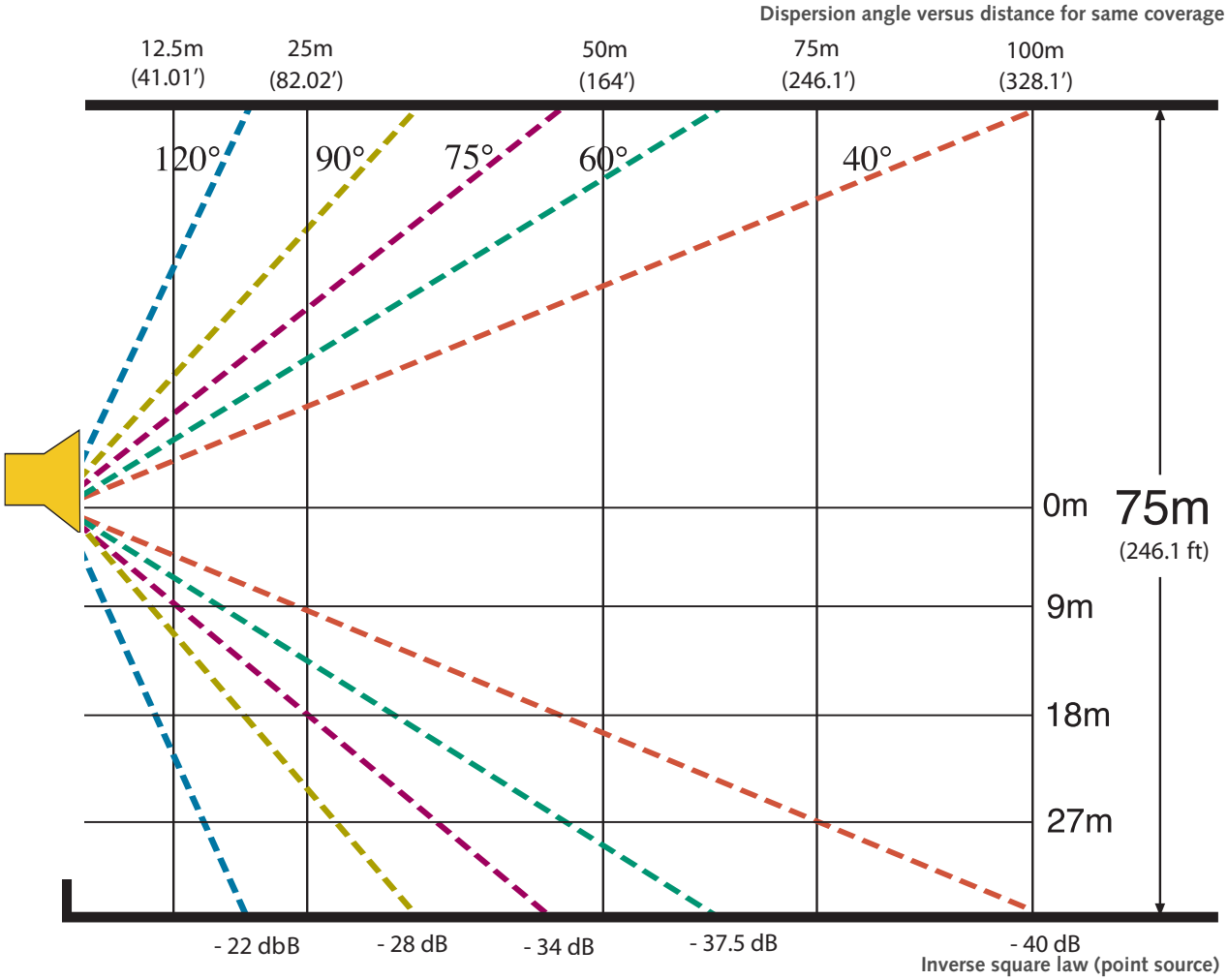
3. *Question:* "At what distance is a (i.e.) 75 meters width reached, using different loudspeakers with different coverage angles?

   Solution: A 120 degrees system provides a covered width of 75 meters after approx. 22 meters. A 40 degree system provides same width after approx. 100 meters.

4. *Furthermore (based on point 3):* "What´s the loss of SPL in both cases?"

   Solution: Approx. 25 dB for the 120 degrees and approx. 40 dB for the 40 degrees system. To achieve a pre-determined SPL of 105 dB, when an area of 75 meters needs to be covered, the 120 degrees system has to deliver > 130 dB and the 40 degrees system > 145 dB. In explanation: A job for MH 4020 which provides 146 dB maximum.

5. *And others…*

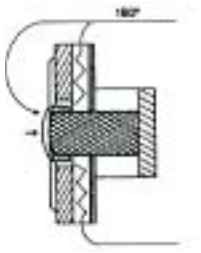


Microphone Technologies

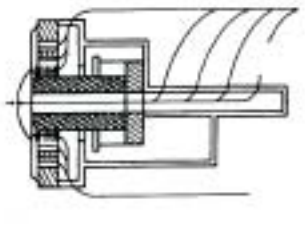
In 1934, Electro-Voice invented the hum-bucking coil for microphones, still an industry standard almost 70 years later. The invention was the beginning of EV's success in building microphones, but not the end. Electro-Voice continues to set new standards for microphone design today. Electro-Voice was the first manufacturer to use neodymium-based magnet structures (N/DYM®) in its microphones, thus achieving higher output and condenser-like qualities such as crystal clarity and reliable performance. Electro-Voice's goals in developing microphone technologies have always been the same: providing highest sound quality, achieving better and more comfortable handling for the user, and continuing the company's tradition of legendary reliability and warranty support. Its long list of patents attests to its success in meeting these goals.

Variable-D®

Normal microphones generate increased bottom end when used close up. This is typically called the "proximity effect." While some lead vocalists like this effect and use it to enhance their performance, it is attainable only in closeup situations. When the distance between the microphone and the source is extended, the sound quality changes dramatically. Electro-Voice's patented Variable-D® eliminates this disadvantage. On the rear side of the diaphragm there is a perforated pipe (interference duct) with precise sonic slots at set distances. The duct provides maximum damping which is completely uncoloured and undistorted at 180-degree off-axis, ensuring the same frequency response as if the source was nearly on-axis.
Variable-D® designed microphones can be used very close to other sound sources with no loss in clarity or definition. This makes them the preferred choice for tight vocals and challenging instruments such as brass. Variable-D® microphones like the RE20 and RE27 are favorites with broadcast show hosts, vocal booths, voice-over studios, and professional touring or rental companies.



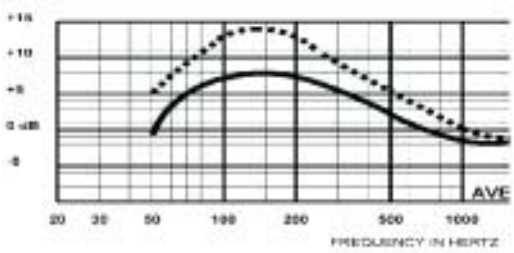
Normal mic



Variable-D® mic

VOB™

Electro-Voice's unique VOB™ technology (Vocal-Optimized Bass) reduces low-frequency distortion in the microphone's output. Critical damping of the low-frequency resonant peak results in a microphone that replaces the "muddiness" found in competitive models with greater warmth and increased vocal intelligibility. With a wider range of working distances than other microphones, this intelligibility ensures a clean, clear, consistent sound that "cuts through the mix." VOB™ counteracts proximity effect, sibilance, and P-popping, thus assuring maximum vocal intelligibility and musical clarity.



with VOB™
without VOB™

PIN - Arrangements

Electronic

Balanced (XLR)
Pin 1: Shield
Pin 2: Hot
Pin 3: Cold

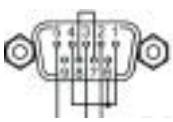
Microphones

Balanced (XLR)
Pin 1: Shield
Pin 2: Signal +
Pin 3: Signal -

TA4F (not shown)
used in N/DYM wireless

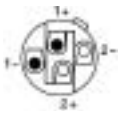
Pin 1: Common
Pin 2: Audio
Pin 3: Bias
Pin 4: Not used

PC interface (RS 232)



Pin 1: parallel to 4 + 6
Pin 2: TxD
Pin 3: RxD
Pin 4: parallel to 1 + 6
Pin 5: common
Pin 6: parallel to 1 + 4
Pin 7: parallel to 8
Pin 8: parallel to 7

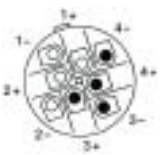
Speakers



Fullrange Pin 1: LF/HF +/-
Pin 2: Not connected

Biamp Pin 1: LF Section +/-
Pin 2: HF Section +/-

Subwoofer Pin 1: LF input +/-



System

Pin 1 in: LF +/- Pin 2! out
Pin 2 in: LF +/- Pin 1! out
Pin 3 in: MB+/- Pin 3 out
Pin 4 in: HF +/- Pin 4 out

Product Feature Symbols

- Weather-resistant
- Also available in white
- Available with high-quality 70/100 volt transformer
- Speaker can be flown. See product features and Speaker Hardware/Accessories
- Mounting hardware available or included. See product features and Speaker Hardware/ Accessories
- Passive or biamped operation
- Designed for multi-way active operation using EV® Dx38 digital controller
- Rotatable constant-directivity horn or identical horizontal/vertical directivity control (i.e. 65° x 65°)
- Ring Mode Decoupling (RMD™) ensures high performance and vocal clarity at any SPL.
- Unfinished version available

Microphone Polar Patterns

- Cardioid
- Supercardioid
- Hypercardioid
- Omnidirectional

EV MICROPHONE APPLICATION TABLE

MICS	APPLICATIONS																	
	VOICE SOUND REINFORCEMENT						VOICE STUDIO		INSTRUMENT									BROAD CAST
	Female	Male	Rock	Jazz	Speech	Choir	Vocal	Speech	Kick Drum	Snare	Toms	HiHat/ Overhead	Guitar Amp	Saxophone/ Woodwinds	Trumpet/ Brass	Piano	Accordion	Guitar/ Strings	ENG
Cobalt Co5	+	+																	
Cobalt Co7	+	+	+	+															
Cobalt Co9	+	+	+																
Cobalt Co11	+	+		+	+							+		+				+	
N/D 367s	++	+	+	+			+												
N/D 267a(s)	+	+	+							+									
N/D 767a	++	++	+	+			+												
N/D 967	+	+	++																
N/D 468										++	++		++	+	+		+	+	
N/D 868									++		+		+						
N/D 478										+	+		+				+		
Cobalt Co4										+	+		+		+			+	
RE 200					+	+						++				++	+	++	
RE 20						++	+	++	++	++	+		++	++	++		++	++	
RE 27						++	+	++	++	++	+		++	++	++		++	++	
RE 510	++	++		++	+	+	+	+		+		++	+	+	+	+	+	++	
RE 50B/NDB																			++
635A (B) / NDB																			++
RE16					++	+													

+ recommended
++ optimal

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